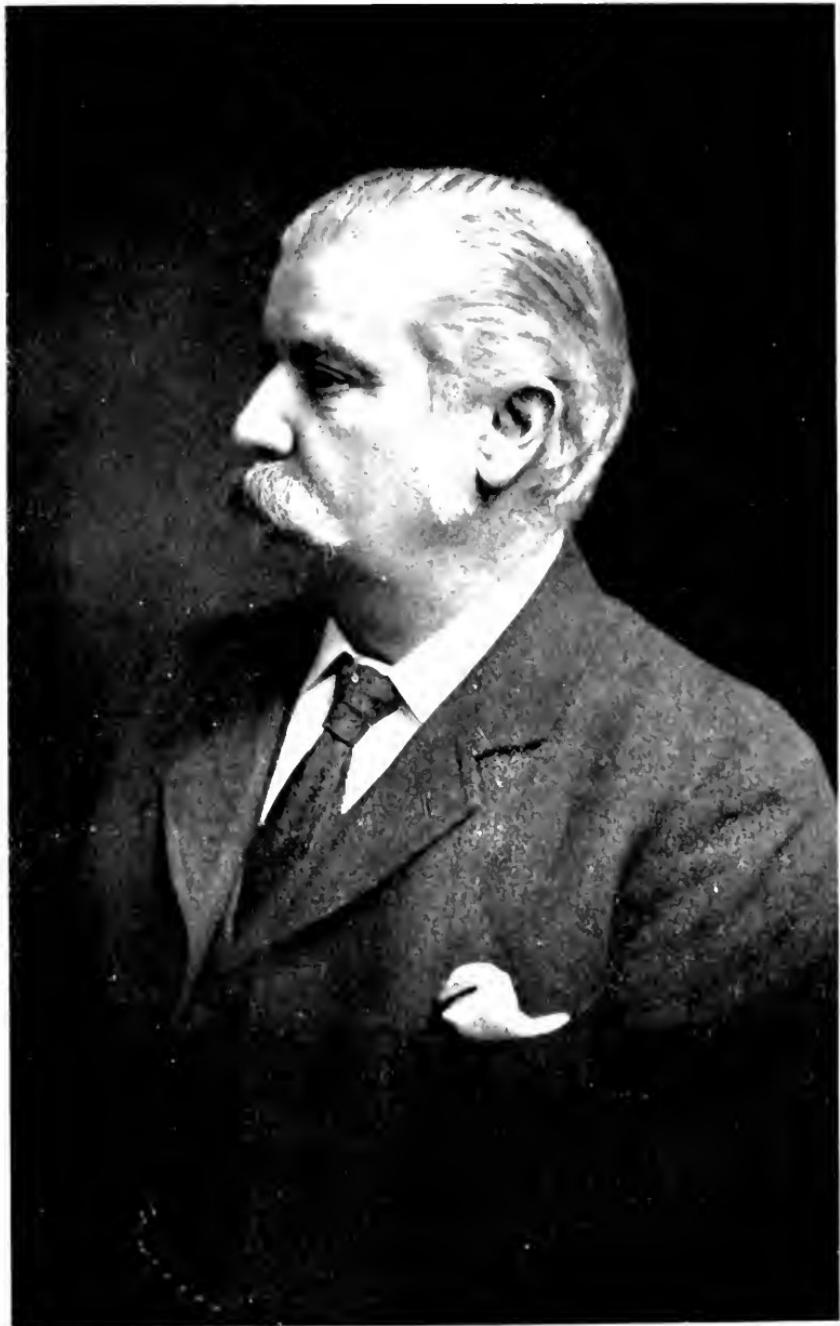


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SIR ALFRED LEWIS JONES, K.C.M.G.

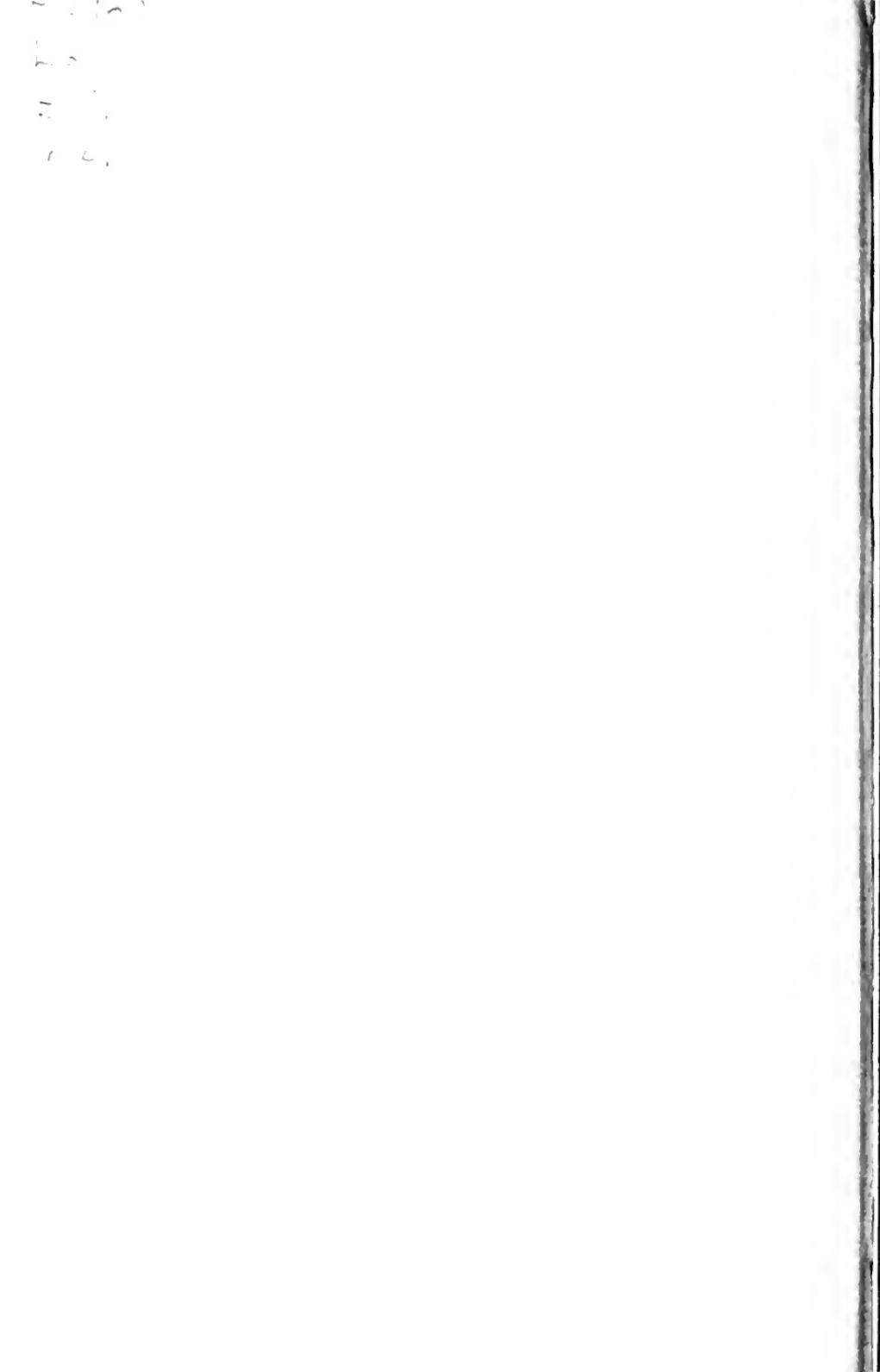
[Dr. M. G. — 1]

*LIVERPOOL SCHOOL
OF
TROPICAL MEDICINE*

*HISTORICAL
RECORD*

1898 - 1920

AT THE UNIVERSITY PRESS OF LIVERPOOL. 1920



THE INCORPORATED
LIVERPOOL SCHOOL OF TROPICAL MEDICINE

FOUNDED BY SIR ALFRED LEWIS JONES, K.C.M.G.
(Affiliated with the University of Liverpool)

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(Princess of Great Britain and Ireland)

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MR. O. HARRISON WILLIAMS

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PROFESSOR E. W. HOPE, O.B.E.

PROFESSOR E. GLYNN

CAPTAIN R. RANKIN, *Hon. Treasurer*

Mr. S. EVANS, *Acting Secretary,*
H 24-25, Exchange Buildings, Liverpool

STAFF, 1920

<i>Professors</i>	JOHN WILLIAM WATSON STEPHENS, M.D., Cantab., F.R.S. <i>Sir Alfred Jones Professor of Tropical Medicine</i>
	ROBERT NEWSTEAD, J.P., F.R.S., M.Sc., A.L.S., F.E.S., <i>Dutton Memorial Professor of Entomology</i>
	WARRINGTON YORKE, M.D., <i>Walter Myers Professor of Parasitology</i>
<i>Lecturers</i>	B. BLACKLOCK, M.D., D.P.H., <i>Lecturer on Parasitology</i>
	HENRY FRANCIS CARTER, S.E.A.C. DIPL., F.E.S., <i>Lecturer on Entomology</i>
	ALWEN M. EVANS, M.Sc., <i>Assistant Lecturer on Entomology</i>
	PROF. E. W. HOPE, M.D., D.Sc., <i>Lecturer on Municipal Sanitation</i>
	T. SOUTHWELL, A.R.C.Sc., F.Z.S., <i>Assistant Lecturer on Parasitology</i>
<i>Honorary Statistician</i>	WALTER STOTT
<i>Honorary Lecturer in Tropical Sanitation</i>	WILLIAM THOMAS PROUT, M.B., C.M.G.

Royal Infirmary, Liverpool

<i>Physician</i>	JOHN WILLIAM WATSON STEPHENS, M.D., Cantab., F.R.S.
--------------------------	--------------------------------------------------------

The Manáos Research Laboratory

<i>Director</i>	HAROLD WOLFERSTAN THOMAS, M.D., C.M.
<i>Research Assistants</i>	ROBERT McCOLL BURNIE, M.B., Ch.B.
	RUPERT MONTGOMERY GORDON, M.B., Ch.B.
	CHARLES JAMES YOUNG, M.B., Ch.B.

THE MARY KINGSLEY MEDAL

This medal was struck in commemoration of the work of the late Miss Mary Kingsley in West Africa, and is conferred in recognition of distinguished scientific achievement.

HONORARY RECIPIENTS

Her Royal Highness Princess Christian
Lord Lister
The Right Hon. Joseph Chamberlain
Prince Auguste d'Arenberg

Mrs. Pinnock
Mr. William Adamson
Professor William Carter

RECIPIENTS

1905—

Colonel Sir David Bruce, K.C.B.
Geheimrath Professor Robert Koch
Dr. A. Laveran
Sir Patrick Manson, K.C.M.G.

1913—

Professor Fred V. Theobald

1907—

Professor Danielewsky
Dr. Charles Finlay
Mr. W. M. Haffkine
Professor Golgi
Colonel Gorgas
Professor Theobald Smith

1917—

Dr. Griffith Evans

1919—

Dr. J. W. Scott Macfie
The Oswaldo Cruz Institute, Rio
de Janeiro

1910—

Sir William Macgregor, G.C.M.G.
Professor R. Blanchard
Dr. Anton Breinl
Professor Angelo Celli
Dr. C. W. Daniels
Surgeon-General Sir Alfred Keogh
Colonel W. G. King
Professor Nocht
Professor G. H. F. Nuttall
Major Leonard Rogers
Professor J. L. Todd
Surgeon-General Walter Wyman

1920—

Major E. E. Austen, D.S.O.
Dr. A. G. Bagshawe
Dr. Andrew Balfour, C.B.
Dr. A. L. G. Broden
Mrs. Chalmers, in recognition of the
work of the late Dr. A. J. Chalmers
Professor B. Grassi
Professor R. T. Leiper
Professor F. Mesnil
Dr. Edmond Sergent
Dr. C. W. Stiles
Dr. T. Zammit



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LIVERPOOL SCHOOL OF TROPICAL MEDICINE

HISTORICAL RECORD

1898-1920

Introduction In the following pages, we give some account of the inception of the Liverpool School of Tropical Medicine in 1898, and its history from that time to the present.

The main scientific achievements of the School are here recorded in mere outline, but even so serve to explain the world-wide reputation the School has won.

These pages have, however, another purpose—to perpetuate those names which have been closely associated with the School in its varying activities in the past. Greatest among them is that of our founder, the late Sir Alfred Lewis Jones, K.C.M.G.; and those who are aware of the early struggles of the School will associate with his name that of the late Sir Rubert Boyce, F.R.S., whose untiring enthusiasm for tropical medicine many of us can still recall.

Nor can we forget the debt we owe to all who have helped to make the School what it is to-day—the Royal Southern Hospital, the Royal Infirmary, the University, the City of Liverpool, and the large body of public-spirited business men, who have given so freely to the School their financial support.

We commemorate also the names of former members of the Staff of the School, some of whom died in its service.

The names of the late Walter Myers and J. Everett Dutton are known, not only to us, but to all students of tropical medicine.

The event which has called forth this record is the official opening of the third laboratory of the Liverpool School of Tropical Medicine.

The Laboratory has now associated with it :—

- (1) The Sir Alfred Lewis Jones Tropical Ward at the Royal Infirmary, Liverpool ;
- (2) The Manáos Research Laboratory in Brazil, and
- (3) The Sir Alfred Lewis Jones Tropical Laboratory in Sierra Leone (in course of erection.)

In the struggle against tropical diseases the part played by the School in the past has been worthy of its founders and of the city of its birth. It has sent thirty-two scientific expeditions to the tropics. It has published twenty-one scientific memoirs, and has issued the 'Annals of Tropical Medicine and Parasitology' from 1907 to the present time.

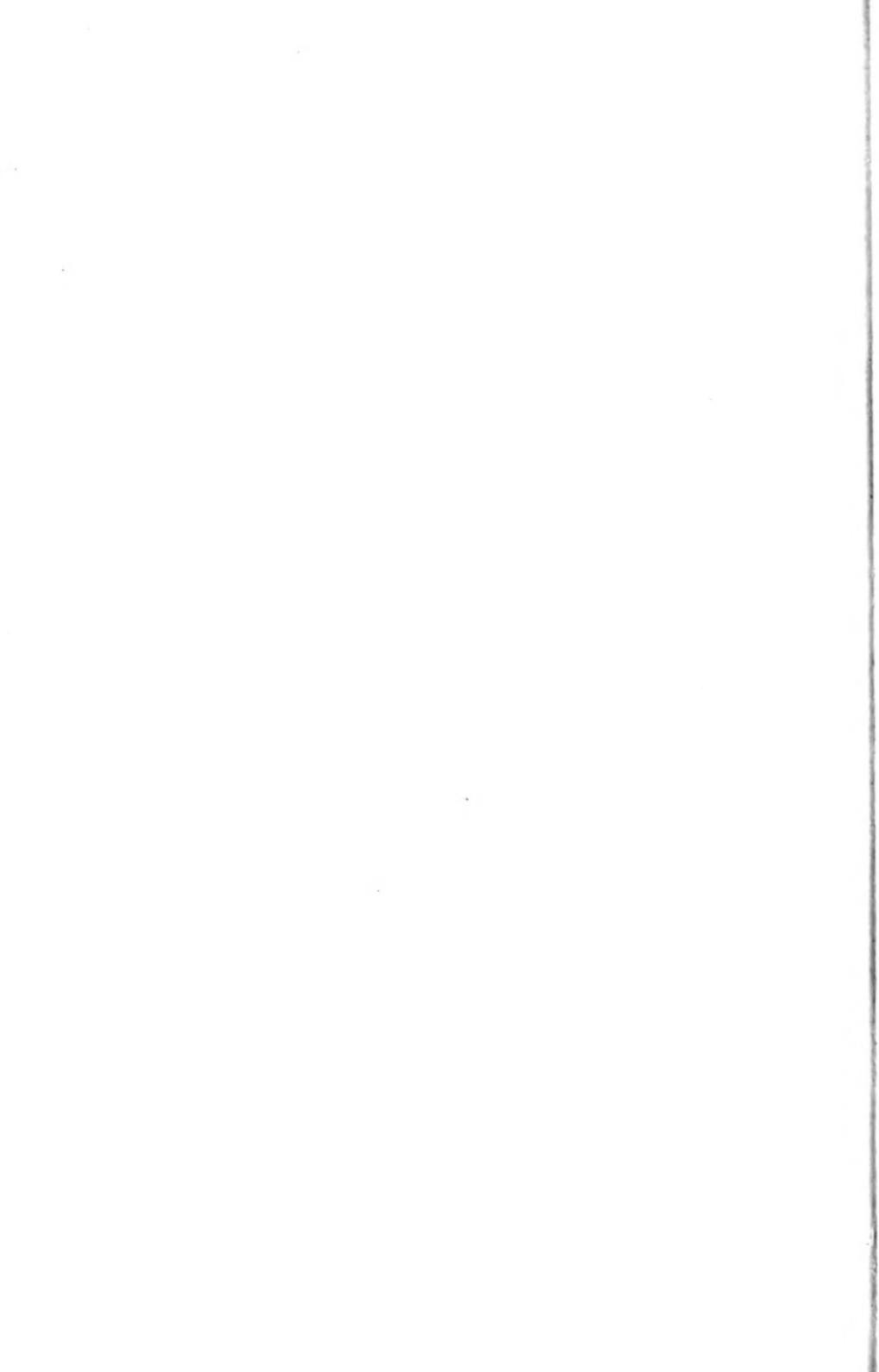
The School has recently appointed three research workers to the Manáos Research Laboratory, and the new laboratory at Sierra Leone will also be staffed by the School. There can be little doubt that this new method of attack, viz., that of continuous research into the diseases of a given locality at their place of origin will lead to results as important as those achieved by our scientific expeditions in the past.

As this record shows, the School has received very generous support, and it has every confidence that this support will be continued in the new era before it.



SIR RUBERT BOYCE, F.R.S.

To face p. 2.



**Inception of
the School**

The loss of human life in our West African and other tropical possessions caused the

1898

Rt. Hon. Joseph Chamberlain, Secretary of State for the Colonies, in 1898, to urge upon the medical authorities of this country the necessity for research into the nature of tropical diseases, and the desirability of affording special instruction to medical officers proceeding to the Tropics.

On March 11th, 1898, Mr. Chamberlain addressed a circular letter to the General Medical Council and the leading Medical Schools of the United Kingdom, pointing out 'the importance of ensuring that all medical officers selected for appointments in the Tropics should enter on their careers with the expert knowledge requisite for dealing with such diseases as are prevalent in tropical climates, and that it was very desirable that, before undergoing such special training, the future medical officers of the Colonies should be given facilities in the various medical schools for obtaining some preliminary knowledge of the subject. . . . I would be prepared,' he added, 'to give preference in filling up medical appointments in the Colonies to those candidates who could show that they had studied this branch of medicine, especially if some certificate or diploma to that effect were forthcoming.'

To this letter the General Medical Council replied : 'while the Council is not prepared to recommend that tropical medicine should be made an obligatory subject of the medical curriculum, it seems highly advisable, in the public interest, that arrangements should forthwith be made by the Government for the special instruction in tropical medicine, hygiene, and climatology of duly qualified medical practitioners, who are selected for the Colonial medical service, or who otherwise propose to practise in tropical countries.'

**Mr. Chamber-
lain's letter
to General
Medical Council
and others**

**Reply of
General Medical
Council**

1898

Mr. Chamberlain's circular
to Colonial Governors

On May 28th, 1898, Mr. Chamberlain addressed a circular to the Governors of all Colonies. After summarising the steps which had been taken, he went on to say :—

' The great mortality among Europeans in such climates as those of the West African Colonies and Protectorates has not failed to attract my notice from the first, as it had that of my predecessors in office, and towards the end of the year 1897, largely through the interest taken in the matter by Dr. Manson, who had succeeded Sir Charles Gage-Brown as medical adviser of the Colonial Office, my attention was more definitely directed to the importance of scientific inquiry into the causes of malaria, and of special education in tropical medicine for the medical officers of the Crown Colonies.

' In pursuance of the second of these two objects, it was clearly advisable (*a*) that a special Training School in Tropical Medicine should be established, where officers, newly appointed to the medical services of the Colonies and Protectorates, might be given systematic instruction, with special facilities for clinical study, before leaving England to take up their appointments, and where doctors already in the service might, when on leave, have opportunities of bringing their professional knowledge up to date; (*b*) that all the leading medical schools in the United Kingdom should be invited to give greater prominence than hitherto in their schemes of study to tropical medicine; (*c*) that the medical reports periodically sent from the tropical Colonies and Protectorates should be recast on one uniform type, designed to throw light on the diseases which are most prevalent in tropical countries, and to indicate the methods likely to be most successful in preventing or curing such diseases.'

The result of this circular was the official formation of the London School of Tropical Medicine.* A totally

* Staff appointed, May, 1899; teaching commenced, 2nd October, 1899; officially opened, October 3rd, 1899.



THE RT. HON. JOSEPH AND MRS. CHAMBERLAIN

Top left, p. 4.

unlooked-for result was the formation of the Liverpool School.* This came into being slightly before the London School, and was entirely due to the energy and public spirit of two men : Alfred Lewis Jones and Rubert Boyce.

At the Annual Dinner of the students of the Royal Southern Hospital, held on November 12th, 1898, Mr. A. L. Jones made the announcement that he was prepared to contribute £350 per annum for three years to promote the special study of tropical diseases. This offer was accepted by Mr. William Adamson, the President of the Royal Southern Hospital, in the following letter :—

1898
Liverpool
School of
Tropical
Medicine

Mr. A. L.
Jones, offer

‘ 9 Sunnyside,
‘ Prince’s Park,
‘ Liverpool.

‘ Alfred L. Jones, Esq., J.P.,
‘ Liverpool.

‘ 14th November, 1898.

‘ Dear Sir,

‘ Your liberal offer to contribute £350 per annum for the study of Tropical Diseases in connection with the Royal Southern Hospital was received with considerable enthusiasm on Saturday evening, and on behalf of the Committee of that Institution I sincerely thank you.

‘ It is the intention of the Committee to pull down all the block of houses, towards the purchase of which you so generously contributed, opposite to the Hospital in Caryl Street, and, thus having a clear open space, to erect in the centre various necessary buildings, among others one where the special work designed by your munificent offer will be more advantageously carried out than by having cases of Tropical Diseases scattered through the general wards as they are at present.

‘ Ever since its foundation our Hospital has had a far larger number of such cases than probably all the other Hospitals put together, in fact, we are seldom, if ever, without several at any one time, and sometimes there are many.

‘ The Laboratory part of the work would be well handled at the University College, but the proximity of the Southern Hospital to the Docks, especially your steamers, points to this Institution as being the one where the Clinical part must be done if the safety of the patients is to be considered.

* Dean appointed, January 2nd, 1899; Demonstrator in Tropical Pathology, February 7th; Lecturer in Tropical Medicine, April 10th; teaching commenced, May, 1899; officially opened, April 22nd, 1899.

1898

‘As you are one of the Committee of this Hospital it would be most gratifying to all of us and the town at large if a suitable building in the space named, and containing a necessary number of beds, could be erected at once and called after your good self as the founder.

‘I remain,

‘Most truly yours,

WILLIAM ADAMSON.

‘P.S.—If my memory serves me correctly the Government subsidised a number of beds in the Royal Southern Hospital for the use of the soldiers returned from the Ashanti War.’

In support of the project, Principal Glazebrook received the following letter from Dr. Michael Foster, Secretary of the Royal Society:—

‘The Royal Society,

‘Burlington House,

‘London, W.

‘18th November, 1898.

‘My Dear Glazebrook,

‘I think the idea of starting something at Liverpool about Tropical Diseases in connection with the College, most admirable. The opportunities of studying Tropical Diseases are greater at Liverpool than anywhere else in England, excepting perhaps London.

‘You have to arrange:—

‘1. For teaching.

‘2. For Investigation.

‘No. 2 wants, I think, more support than No. 1.

‘If you have a ward, say at the Southern Hospital, one of the physicians might take charge of it, and give lectures, clinical at the Hospital, and general say at the College—I suppose you might give him a title.

‘For investigation you do not, I think, need a separate Laboratory at College, but a small Clinical Laboratory at the Hospital itself. At this Clinical Laboratory ordinary observations would be made; any prolonged research would be carried on at the Pathological Laboratory of the College, there is room enough there.

‘The next point, I am in doubt about. I am inclined to think that the Pathology of Tropical Diseases should belong to the *Professor of Pathology*, who should, by virtue of this have some connection with the Tropical Diseases Ward in the Hospital, have access to the cases, &c. But he would need an assistant Pathologist, specially told off to take care of the Pathology of Tropical Diseases, a young man, qualified, *not* a student, say at a salary of £250 or so. He, under the Professor, should have command of the Clinical

Letter from
Secretary of
the Royal
Society in
support of
project

1898

Laboratory, and free access to cases ; whether he should give Lectures or Demonstrations only might be arranged between him and the Professor.

' This system of a Pathologist working with the Physician or Surgeon in Clinical charge of the sick is being very largely worked with great success in America, and this Tropical Disease seems to offer an opportunity for it.

' I have talked with Lord Lister, and he generally approves of what I have proposed, at least, thinks it most desirable that the Hospital and College should lay hold of Tropical Diseases.

' I myself feel very strongly that it is an opportunity of *study* of these diseases.

' When the experts on Malaria sent out to Africa get to work on the West Coast, as they will in time do, it will be a great advantage to have an Institution for Tropical Diseases already in work at Liverpool. The experts abroad can work with the men at home.

' Ever yours truly,

' M. FOSTER.'

This correspondence was circulated and a meeting convened by Mr. A. L. Jones at the offices of Messrs. Elder, Dempster & Co., on Wednesday afternoon, November 23rd, 1898, to consider the question of the treatment of malaria cases. The following were present :—

Alfred L. Jones ;

William Adamson, President of the Royal Southern Hospital ; R. T. Glazebrook, F.R.S., Principal of University College, Liverpool ;

William Alexander, M.D., F.R.C.S., Senior Surgeon of the Royal Southern Hospital ;

William Carter, M.D. (Lond.), F.R.C.P. (Lond.), Physician to the Royal Southern Hospital, Professor of Therapeutics, University College, Liverpool ;

Rubert Boyce, Holt Professor of Pathology, University College, Pathologist Royal Infirmary, Bacteriologist to the Liverpool Corporation, and Consulting Pathologist Royal Southern Hospital.

Original
Meeting and
formation of a
Committee

Mr. Alfred L. Jones was appointed Chairman, and Mr. William Adamson, Vice-Chairman.

The following Resolutions were unanimously passed :—

1. ' That the gentlemen present form themselves into a Committee, with the approval of their various boards, for promoting the study of Tropical Diseases,

1898

and to consider the best means of carrying out Mr. Alfred L. Jones' intentions in the munificent offer he has made to further the above object.'

2. 'That Mr. Charles W. Jones (of Messrs. Lamport and Holt) be asked to serve on this Committee.'

It was decided that the above resolutions be printed, and that Mr. Alfred L. Jones hand a copy to the Rt. Hon. Joseph Chamberlain, Secretary of State for the Colonies.

**Formation of
Professional
Sub-Committee**

The Committee recommended that before the next meeting, the Professional Members should meet together to consider and suggest the best means for practically carrying out these objects.

Mr. Samuel James was appointed Secretary to this Committee.

A second meeting of the Committee was held on Monday, Dec. 12th, 1898. A letter, dated Dec. 1st, 1898, from Lord Ampthill, of the Colonial Office, to the Chairman was read :—

'Dear Mr. Jones,

'I have shown your letter of the 28th ult. with regard to the School of Tropical Medicine, which you have started in Liverpool, to Mr. Chamberlain. He was much interested and very glad to hear of the important work you have thus commenced.

'You are no doubt aware of what Mr. Chamberlain has been doing himself with regard to the establishment of a School of Tropical Medicine at the Seamen's Hospital, and he considers it a great advantage that Liverpool should be co-operating on similar lines.

'If it would interest you, I should be very glad to send you particulars of the Colonial Office scheme and information as to what has been done already, but I dare say that you have learnt all that is essential from the newspapers.

'Yours very faithfully,

'(Signed) AMPHILL.'

It was announced that Mr. Charles W. Jones had consented to serve on the Committee.

The professional members forming the Sub-Committee presented the following report :—



PLAGUE INVESTIGATION

To fair p. S.

1898

There are already in connexion with University College, Schools of Art, of Law, and of Hygiene. Following the analogy of these schools, the Committee suggest the formation of a permanent Joint Committee to manage the school, to be called the Committee of the Liverpool School of Tropical Diseases.

Such a Committee should include :—

Committee

1. Representatives of Merchants and Ship Owners of Liverpool, viz. :
 - (a) Two Representatives nominated by the Liverpool Chamber of Commerce.
 - (b) Two Representatives nominated by the Steamship Owners' Association.
 - (c) Two Representatives nominated by the Sailing Ship Owners' Association.
2. Two Representatives nominated by the Committee of Management of the Royal Southern Hospital.
3. Two Representatives nominated by the Council of University College.
4. Two Representatives nominated by the Staff of the Royal Southern Hospital.
5. Two Representatives nominated by the Senate of University College.

Duties of Committee

This Committee should have the General Management of the School in accordance with a scheme to be agreed upon by the College and the Hospital, should be responsible for the administration of the funds available for the School, and should nominate, for appointment by the authorities of the College and the Hospital, those members of the Staff of the School who did not hold office *ex-officio* in virtue of other appointments

Appointment of Lecturer

As to the Lecturer in Tropical Diseases, it is important that the Committee of the School should be in a position to contemplate the possibility of a gentleman being appointed to this post who is not a member of the staff of the hospital. The Committee suggest that arrangements might be made whereby the Lecturer for Tropical Diseases should be appointed Consulting Physician for Tropical Diseases to the Royal Southern Hospital and thus have access to the cases in the Hospital.

The Staff should consist of the following Members :—

Staff

1. *Ex-officio :*

- The Physicians of the Hospital.
- The Surgeons of the Hospital.
- The Professor of Pathology.
- The Hospital Tutor.

1898

**Qualifications
of Students****2. Members nominated by the Committee :**

The Lecturer in Tropical Diseases.

The Demonstrator of Tropical Pathology.

Must be qualified medical men of this or foreign countries, or 5th year students. In other circumstances special application must be made.

**Certificate of
Tropical
Diseases**

At the end of the course an examination will be held, and a certificate will be awarded to successful candidates.

Finance—**A. Annual
Expenditure**

The Committee recommend that :—

1. The Lecturer in Tropical Diseases receive a salary of not less than £250 per annum, and some share of the students' fees.
2. That the Demonstrator of Tropical Pathology receive a salary of £200 per annum.
3. That an annual sum of £100 be allowed for expenses in connection with the special Ward and Laboratory of the Hospital.
4. That for the expenses connected with the Laboratory Course at University College, an annual sum of £75 be allowed.
5. That for expenses connected with the Tropical Diseases Museum, an annual sum of £25 be granted.

The total of the annual expenditure is £500.

The Committee are of opinion that to meet the cost of printing and other incidental expenses, an additional sum of £100 a year should be provided, thus making the total annual sum necessary to carry the scheme into effect, £600.

**B. Capital
Outlay**

Additional buildings are needed at the Hospital and College. The Committee think that their scheme should be regarded in the character of a national undertaking—that it should receive national as well as local support. The Hospital are owners of a large and very eligible site in immediate contiguity to the present Institution, which they are willing to devote to the purpose the Committee have in view. It is felt that for the erection of buildings worthy of the reputation of the city and of the reputation which they believe this School will speedily attain, a capital expenditure of from £6,000 to £10,000 will be required for building purposes. Similarly, in connection with the Thompson-Yates Laboratories, requisite space for additional accommodation in connection with the Museum of Pathology and Museum work-room can be provided in part of the old buildings of the Medical School adjacent to the present Museum, at a capital expenditure of £2,500.

**Government
recognition**

In order that the work of the School may be carried on with effect, the Committee think it of the utmost importance that the Government should recognise its Courses of Study and Certificates,



FEEDING MOSQUITOES

To face p. 10.

1898

and that the School should thus be placed in this respect on an equality with any other School of Tropical Diseases that may be established in London or elsewhere. The Committee point out that gentlemen intending to take up appointments in the Colonies either under the Government or in civil positions, or to become Medical Officers of ships trading to Tropical Countries, and others who might wish to avail themselves of the advantages afforded by the School, would probably hesitate to do so if they felt that a Certificate, carrying with it what would appear to be a Government recognition of superiority, was to be obtained exclusively elsewhere.

**Establishment
of the Liverpool
School of
Tropical
Diseases**

It was moved by Principal Glazebrook, seconded by Dr. Carter, and unanimously agreed that the foregoing suggestions by the Sub-Committee be accepted.

Dr. Carter, Principal Glazebrook, and Mr. Alfred L. Jones were appointed a Deputation to wait upon the Rt. Hon. Joseph Chamberlain and lay the scheme before him.

At a meeting of the Committee, held on January 20th, 1899, it was decided to advertise for a lecturer in tropical diseases, at a salary of £250 per annum and a proportion of students' fees.

1899

Professor Boyce was appointed Dean of the Liverpool School of Tropical Diseases.

**Appointment
of Dean**

On February 7th, Dr. H. E. Annett was appointed Demonstrator in Tropical Pathology to the Liverpool School of Tropical Diseases, at a salary of £200 per annum, payable quarterly from February 1st, 1899. Dr. Annett was thus the first salaried official of the School.

**Appointment of
Demonstrator**

The following sums of money were voted :—

i. Royal Southern Hospital.

- (a) For sundry alterations in rooms adjoining the Thompson Ward and fitting the same as a laboratory, not exceeding £100
- (b) Apparatus for the above £38

1899

2. University College.

(a) Thompson-Yates Laboratory, not exceeding £135

(b) Books for special tropical diseases library... £50

Hon. Treasurer

Mr. John O. Strafford was authorised to sign cheques and transact other business as Treasurer for the School.

Hon. Secretary

It was intimated that Mr. James' duties at the Royal Southern Hospital would not permit of his continuing to do the secretarial work of this Committee, and it was decided to appoint Mr. Alan Hay Milne, Under-Secretary to the Chamber of Commerce, provided that body were willing that he should accept the post.

**Representatives
of Chamber of
Commerce on
the Committee**

On March 2nd, Dr. E. Adam and Mr. J. O. Strafford were appointed on the Committee as representatives of the Liverpool Chamber of Commerce.

**Application for
Government aid
and recognition**

A letter, dated February 1st, from the Colonial Office was read, in which it was stated that Mr. Chamberlain was very glad to learn that it had been decided to establish this School, but regretting that the Government could not grant any financial aid; however, in the selection of candidates for medical appointments in the Colonies, preference would be given to those who had received instruction in tropical medicine, such as that provided in the Liverpool School. A further letter from Mr. Chamberlain, dated February 23rd, stated that at present all doctors appointed to the Colonial Service must be attached to the Albert Docks' Hospital for at least two months.

It was resolved (1) to write to the Colonial Office and express regret that Mr. Chamberlain did not see his way to dispense with the latter condition in the case of students from the Liverpool School; and (2) to approach the Colonial Office on the subject later.

**Letter from
Dr. Koch
foreshadowing
foundation of
German
Tropical
Institute**

Dr. Koch, having been invited by Professor Boyce to attend an inaugural dinner, replied, regretting his inability to do so as he was about to proceed on another expedition.

FIRST LABORATORY OF THE SCHOOL.



He added : ' it is intended to found in Germany an institution for instruction and research in tropical hygiene and diseases.'

1899

On March 20th, Professor Boyce announced that Lord Lister had written stating that he intended to approach Mr. Chamberlain on behalf of the School, and it was therefore resolved to postpone further action in the matter pending receipt of information concerning the result of Lord Lister's interview.

Lord Lister's
endeavour to
obtain
Government
recognition

A letter was received from the Steamship Owners' Association, dated March 14th, stating that Messrs. J. W. Hughes and Charles Booth, jun., had been appointed to represent the Association on the Committee of the School.

Representatives
of Steamship
Owners'
Association
on Committee

The date of the inaugural dinner was fixed for April 22nd, to suit the convenience of Lord Lister.

Inaugural
Dinner

A draft circular appealing for subscriptions to the School was submitted for consideration.

It was reported that a meeting of the Consuls in Liverpool had been held on March 9th, and that the Consuls had resolved to bring the School before the notice of their respective Governments. Letters were received from the Consuls for Mexico, the United States of America, Italy, and the Argentine Republic, stating that they had now done so.

Support of
Consuls

On April 10th, Professor Boyce stated that the Professional Sub-Committee recommended the appointment of Major Ronald Ross, I.M.S., to the post of tropical lecturer ; Professor Boyce having made a statement regarding the qualifications of Major Ross, it was unanimously resolved that he be appointed lecturer to the School, at a salary of £250 per annum and a proportion of students' fees, subject to the approval of University College and the Royal Southern Hospital.

Major Ross
appointed
Lecturer to
the School

1899

Representatives
of Ship Owners'
Association on
Committee

A letter was received from the Ship Owners' Association, dated March 29th, nominating Colonel Goffey and Mr. J. Chadwick as their representatives on the Committee of the School.

Letters were received from the Consuls for Liberia, Serbia, Peru, Costa Rica, San Domingo, and Spain, stating that they were bringing the School to the notice of their respective governments.

Appointment of
Major Ross
approved by
the Council of
University
College

On May 1st, letters were received from the Principal of University College, stating that the Council approved the appointment of Major Ross, and from the Royal Southern Hospital, stating that Major Ross had been elected Honorary Consulting Physician for tropical diseases at the Hospital.

At this time the constitution of the Committee and Staff was as follows :—

COMMITTEE

Mr. Alfred Jones, *Chairman.*

Mr. William Adamson, *President of the Royal Southern Hospital Vice-Chairman.*

Principal Glazebrook and Mr. Charles W. Jones, *Council of University College.*

Professor R. W. Boyce, *Dean,* and Professor A. M. Paterson, *Senate of University College.*

Dr. W. Alexander and Professor W. Carter, *Royal Southern Hospital.*

Mr. J. O. Strafford and Dr. E. Adam, *Hon. Treasurers, Liverpool Chamber of Commerce.*

Mr. C. Booth, jun. and Mr. J. W. Hughes, *Liverpool Steamship Owners' Association.*

Colonel J. Goffey and Mr. J. Chadwick, *Liverpool Ship Owners' Association.*

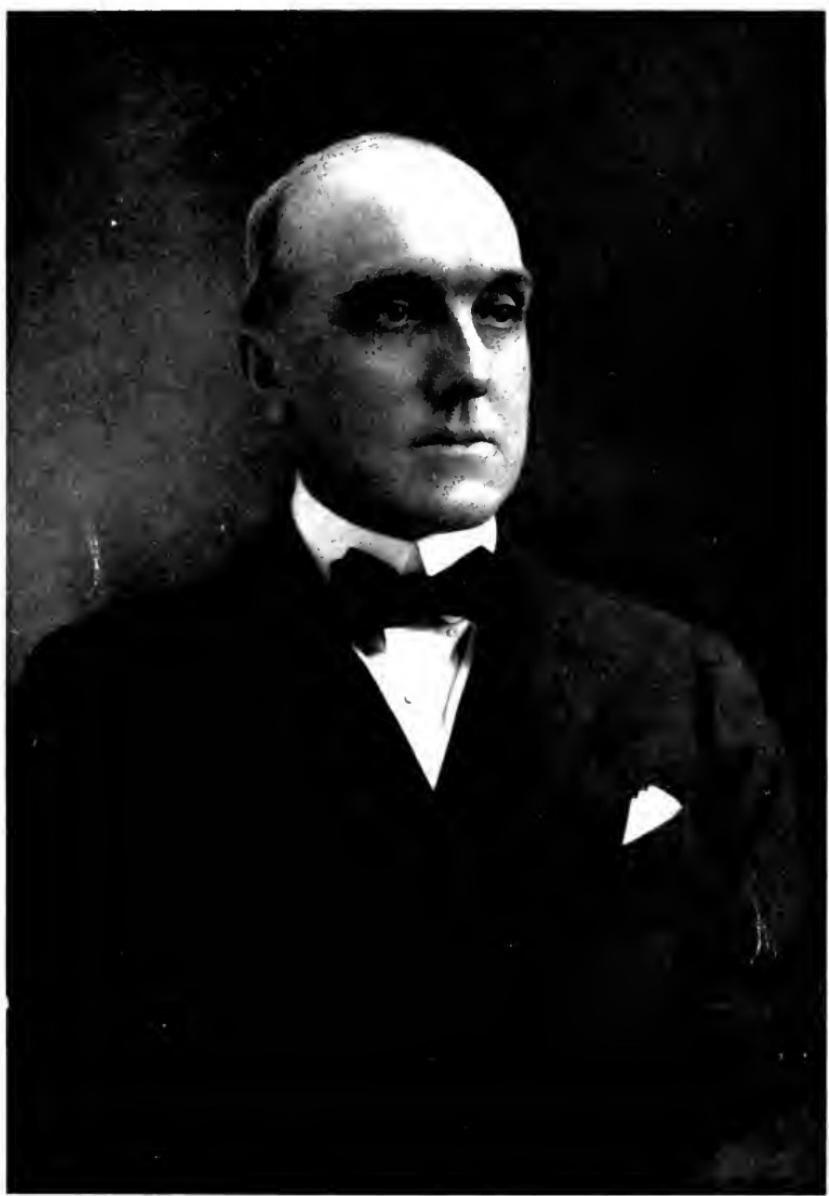
Mr. A. H. Milne, *Hon. Secretary.*

STAFF

Major R. Ross, *Lecturer on Tropical Diseases.*

Dr. H. E. Annett, *Demonstrator in Tropical Pathology.*

Teaching commenced in May of this year.



A. H. MILNE, C.M.G.

The sum of £30 was voted towards the maintenance and training in tropical diseases of three nurses to be supplied by the Colonial Nursing Association.

1899

Colonial
Nursing
Association

The following were appointed to act as a Finance Sub-Committee :—Messrs. W. Adamson, C. Booth, jun., C. W. Jones, J. Chadwick, J. W. Hughes, and J. O. Strafford.

Formation of
Finance
Sub-Committee

A letter, dated April 19th, was read from the Chairman, offering to arrange for a deputation to the King of the Belgians, and also a telegram to the Chairman from his Belgian agent, dated May 1st, to the effect that the King would probably receive a deputation on May 6th. The minute adds: ‘this date not being convenient, it was left to the Chairman to arrange a suitable date.’ At the next meeting of the Committee, on May 29th, letters from the Chairman, dated May 7th and 12th, were read, suggesting that this matter should not be pressed at present.

On June 12th, the Committee having sanctioned the expenditure of £1,200 per annum for three years, it was resolved to inform Major Ross that his salary of £250 per annum would be guaranteed at any rate for three years.

A letter was received from the Belgian Consul-General, informing the Committee that the Belgian Government had officially appointed Dr. G. van Neck to visit Liverpool and report on the School.

Interest of
Belgian
Government
In the School

1st Expedition On the advice of Major Ross, an Expedition was organised to proceed to West Africa, consisting of Major Ross, Dr. H. E. Annett, Mr. E. E. Austen—the services of the last-named being lent by the trustees of the British Museum, his expenses being paid by the Chairman of the School—and Dr. van Neck, of the Belgian Government, who paid his own expenses. The Colonial Office, India Office, and Foreign Office were unable

1899

to offer any pecuniary assistance, but the Colonial Office instructed the Sierra Leone Government to give every facility to the work of the Expedition. The British Medical Association sent a cheque for £100, to be used solely for the purposes of the Expedition. The Expedition sailed to West Africa on July 29th. On August 17th, a cable was received from Major Ross, saying that the Expedition had discovered the 'malaria mosquito,' and asking for an assistant. The Colonial Office were asked to provide an assistant, but they were unable to do so: it was accordingly resolved to send out Dr. R. Fielding Ould, at the expense of the School, with a view to his remaining in West Africa after the return of the original Expedition. It was decided that he be paid for his services at the rate of £100 per annum, and that he be requested to sail in four days' time.

2nd Expedition Dr. Fielding Ould subsequently visited the Gold Coast and Lagos.

On October 30th, the Secretary reported that the Japanese Government had appointed an official to study at the School.

Professor Boyce stated that certain members of the Royal Society Commission on Malaria would shortly proceed to the West Coast of Africa, and suggested that the School should offer to defray the expense of their passages to the Coast. The Chairman having notified his readiness to defray the passages of the members of the Commission in question, Principal Glazebrook was authorised to convey that fact to Lord Lister, on the understanding that advantage would be taken of the opportunity to impress upon Lord Lister the fact that the School desired official recognition at an early date.

On January 8th, the first Annual Report of the School was approved and ordered to be published.

The following circular, addressed by Mr. Chamberlain to Colonial Governors, was received :—

1900

First annual report

Partial Government recognition

‘ Downing Street,
11th November, 1899.

‘ Sir,

‘ I have the honour to transmit to you, with reference to previous correspondence, the accompanying copies of the Syllabus of the London School of Tropical Medicine.

‘ 2. In this Syllabus, the rate of the tuition fees chargeable to students is stated, and the enclosed print contains supplementary information regarding the fees for board and residence.

‘ 3. The School is now open and I shall be glad to learn whether you concur in the following arrangements which it is proposed to make for the training of Colonial Medical Officers :—

‘ (a) All Colonial Medical Officers who may in the future be selected by the Secretary of State, will be required to undergo a course of instruction for two months at the School.

‘ (b) The cost of the tuition fees and also the fees for board and residence during the above period will be borne by the Colonial Government under which the Officer is about to be employed, each Officer being required to sign an Agreement with the Crown Agents for the Colonies by which he will be bound to repay to the Colonial Government the total amount of these fees in the event of his relinquishing his appointment within three years from the date of his arrival in the Colony for any other reason than mental or physical infirmity.

‘ (c) In the case of Medical Officers already in the service of a Colony who may desire, or who may be required to undergo a course of instruction in tropical medicine when they are on leave in this country, the tuition fees, but not the fees for board or residence, will be paid by the Colony.

‘ 4. A School of Tropical Diseases has been recently established at the University College, Liverpool, and as it is excellently equipped for the teaching of Tropical Medicine, I propose that Officers already in the Colonial Service shall be allowed to receive their instruction there instead of at the School in London, if they desire to do so. Newly appointed Officers will, however, always be sent to the latter School.

‘ 5. It will be seen from the second enclosure in this despatch that, under these arrangements, the total cost of training a newly

1900 appointed Officer will be £30 17s. 4d., while, in the case of an Officer already in the Service, the cost will only be £11 12s. od. These sums are so small when compared with the advantages which will result from the introduction of the new scheme that I am taking steps to bring it into operation in anticipation of your concurrence.

‘6. In the case of Officers already in the Colonial Service, you should give me as early an intimation as possible of their desire to receive instruction, and, if the School in London is selected by an Officer, it should be stated whether he wishes to reside at the School itself, in order that arrangements may be made, if possible, for his accommodation there.

‘I have the honour to be,

‘Sir,

‘Your most obedient, humble Servant,

J. CHAMBERLAIN.

‘The Officer Administering

‘the Government of

,

Memoir I

On February 8th, it was announced that Memoir No. I, *Instructions for the Prevention of Malarial Fever*, was rapidly being sold out and might require a second edition.

3rd Expedition A Malaria Expedition, consisting of Drs. Annett, Dutton, and Elliott, was dispatched to Nigeria on March 21st. It was decided that the doctors named should be paid at the rate of £25 per month. Mr. Chamberlain commended the Expedition to the High Commissioner of Southern Nigeria, who subsequently set apart government buildings for the use of the Expedition. On April 18th, a telegram was received from Dr. Annett, stating that the Expedition had already discovered *Anopheles*.

**Increased
Expenditure**

On April 30th, it was unanimously resolved that the annual grant of the School to the Royal Southern Hospital be increased to £200, and Major Ross' salary be increased to £300, and a bonus of £75 be awarded to the Honorary Secretary.

On May 14th, it was announced that a London firm had ordered 1,000 copies of Memoir I.

LIVERPOOL SCHOOL OF TROPICAL MEDICINE. MEMOIR I.

INSTRUCTIONS

FOR THE

PREVENTION OF MALARIAL FEVER

FOR THE USE OF RESIDENTS IN
MALARIOUS PLACES

FIFTH EDITION

AT THE UNIVERSITY PRESS OF LIVERPOOL 1900

A letter was read from Mr. C. P. Lucas, dated May 4th, asking that a statement regarding the work of the School might be furnished to the Colonial Office, with an additional statement of what the School requires from the Government. It was resolved that a statement be drawn up, and that the Government be asked to make a financial grant to the School in addition to giving full recognition in the matter of students.

1900

On June 4th, a letter was received from the Foreign Office, stating that Lord Salisbury was considering the terms of the arrangements to be made for a special course of tropical medicine for medical officers in the various African protectorates, under the administration of the Foreign Office.

On June 18th, a letter was received from the Colonial Office, ordering 400 copies of Memoir I, *Instructions for the Prevention of Malarial Fever*.

Demand for publications

A public meeting was held in Liverpool on June 25th, with Mr. A. L. Jones in the Chair, the speakers being Professor Boyce, Dr. Carter, Major Ross, Dr. Fielding Ould, Professor Flexner, and Dr. Durham. On the motion of the Chairman, seconded by Mr. E. K. Muspratt, and supported by Principal Dale, the following resolution was carried unanimously :—

Public Meeting

‘That steps should be immediately taken by Her Majesty’s Government to improve the conditions of life for Europeans in the tropics in every possible direction, by the segregation of Europeans, improved sanitation, better water supply, clearance of bush near towns, light railways to the mountains, and such other means as science may direct ; and that the Liverpool Chamber of Commerce be requested to co-operate with the School, and to ask the Government to receive a joint deputation on the subject.’

4th Expedition An Expedition, consisting of Dr. Durham, Grocers’ Research Scholar, and Dr. Walter Myers, John Lucas Walker Student, was dispatched on

1900 June 30th to study yellow fever on the Amazon. It was decided that Drs. Durham and Myers should be paid a salary of £25 a month while serving on the Expedition. At the invitation of the Treasury Department of the U.S.A. Marine, the Expedition visited the Marine Hospital Bureau and Laboratory at Washington, and at the invitation of Dr. Sternberg they subsequently proceeded to Cuba to visit the Yellow Fever Commission of the U.S.A. Government.

Recognition by Government On August 3rd, a letter was read from the Colonial Office, dated July 12th, giving the School full recognition by placing it on the same terms as the London School with regard to newly-appointed medical officers and their courses of training; and also one from the Foreign Office, dated July 5th, enclosing a circular to the African Protectorates, stating that all doctors who may in future be selected for appointments in the Protectorates must take out an eight weeks' course of instruction at either the London or Liverpool School.

Nigeria Expedition. Important scientific discovery On August 4th, a telegram was received from Dr. Annett, stating that the Expedition had discovered the parasite of elephantiasis in the proboscis of *Anopheles*.

On September 10th, it was resolved that the terms of the School be 1st October—31st December, 15th January—14th April, 1st May—31st July.

Housing of students The advisability of renting a house for the residence of students was considered on 17th September, and it was agreed that if a suitable house could be found at about £50 per annum, it should be rented, and arrangements made with the University Club for the meals of the students.

Appointment of Assistant Lecturers

On November 5th, Drs. Fielding Ould, Balfour Stewart, and A. Grünbaum were appointed Honorary Assistant Lecturers.



WALTER MYERS

To face p. 20.

The 3rd Expedition returned from Nigeria in November, and on December 17th it was resolved that a bonus of £40 be paid to each of the members of the Expedition, in addition to the salaries received by each.

1900

Major Ross, having been invited by Dr. Woldert, Dr. Osler, and Dr. Gibson, distinguished scientists in America and Canada, to visit the U.S.A. and to lecture on the subject of malaria fever and mosquitoes, it was resolved to authorise him to proceed to America at the end of February with instructions to make the plans of his visit in accordance with the best interests of the School as regards its scope and duration. It was further resolved to defray Major Ross' expenses in connection with the visit.

**Proposed
visit of
Major Ross
to America**

Mr. F. C. Danson was appointed by the Council of University College, on February 6th, as its representative on the Committee in place of Mr. C. W. Jones.

1901

**Changes on the
Committee**

A public meeting was held in the Town Hall on February 12th, to consider the practical question of improving health conditions in West Africa. The President of the Royal College of Physicians, Sir William Church, was the principal speaker, and the matters discussed, with the recommendations approved, will be found below :—

Public Meeting

OBSERVATIONS

The evidence of the members of the Expeditions respecting sanitary and health conditions on the West Coast of Africa having been carefully considered by the Professional Sub-Committee of the School, the following conclusions were reached :—

A. That the sanitary conditions of most of the stations on the Coast cannot be considered satisfactory. As instances, it may be mentioned that the surface-drainage and clearance of undergrowth are generally defective ; that the clearance and disposal of refuse require more attention ; that the water supply may sometimes be much improved ; that the houses of Europeans and many of the public buildings do not generally reach the standard required for health in the tropics, and are for the most

1901

part erected on unhealthy sites ; and that adequate sanitary laws do not seem to exist, or are certainly not enforced.

B. That while many medical men have shown great zeal and energy, they have not always been able to pay due attention to recent medical researches and methods. As reasons for this may be mentioned the want of microscopes and other apparatus ; the absence of any arrangement for obtaining easy access to medical literature ; the defectiveness of education as regards bacteriology and parasitology ; and the want of encouragement of scientific aptitude and research.

C. That these defects are chiefly attributable to imperfections in medical and sanitary organisation, such as the absence of any adequate central mechanism for originating and enforcing the necessary reforms, and the powerlessness of local medical officers.

RECOMMENDATIONS

The School, therefore, strongly urges that steps may be shortly taken to press upon the Government the need for the following reforms :—

A. The appointment of a Chief Sanitary Commissioner on the Indian model, to travel from town to town on the West Coast of Africa, in order to report fully to the Colonial Office regarding sanitary and medical matters in each Colony ; to suggest necessary reforms ; and to see that such reforms as are approved by the Colonial Office are carried out. It is further recommended that the proposed office of Chief Sanitary Commissioner be placed in the hands of a person who is thoroughly versed in modern medical and sanitary science ; that he should report directly to the Colonial Office ; that he should have as Assistant a Sanitary Engineer subordinate to himself ; and that his salary be met by contributions from the several Colonies which he is appointed to serve, but that he shall not be subordinate to the Government of any of those Colonies. Sanitary Commissioners are appointed in India on these principles, and enable central governments to examine and direct sanitary affairs in subordinate provinces.

B. As regards particular sanitary and medical reforms, many of the following have been largely effected in India, with very great saving of life, and may well be recommended for other tropical countries :—

- (a) The gradual drainage of the soil, and clearance of rank vegetation in and around the principal towns and settlements.
- (b) The erection of suitable houses for Europeans, on proper sites, as funds and opportunities permit—attention being specially paid to the customs prevailing in India in these respects.

ON THIS TABLET THE LIVERPOOL
SCHOOL OF TROPICAL MEDICINE
COMMEMORATES THE UNTIMELY
LOSS IN HIS 29TH YEAR OF
WALTER MYERS WHO ON A
MISSION OF THE SCHOOL AMID
HIS RESEARCHES TO OVERCOME
THE MALADY DIED OF YELLOW
FEVER ON THE 20TH JAN: 1901.

FROM THE SERVICE OF TRUTH
AND HUMANITY UPON EARTH
IN THE MORNING OF HIS MAN-
HOOD HE PASSED TO GOD.

THE WALTER MYERS MEMORIAL TABLET

- (c) Attention to the usual sanitary laws as regards cleanliness, disposal of refuse, water supply, and other requirements.
- (d) The imposition of a good code of sanitary laws and regulations based on the similar Indian municipal regulations.
- (e) Provision of proper apparatus in the hospitals, and of medical literature for Colonial Medical Officers.
- (f) Encouragement of scientific aptitude and research.

1901

Later in 1901, the School received notice from the Committee of the African Trade Section of the Liverpool Chamber of Commerce that the subject of health and sanitation in West Africa was being considered by that Committee, together with the African Section Committee of the Manchester Chamber of Commerce. The School was invited to send delegates to attend several meetings convened by the former Committee, at which the foregoing statement was submitted and considered, and they were asked to co-operate with the Liverpool, Manchester, and London Chambers in the matter.

As a result of the combined movement, an important deputation was organised by the Chambers of Commerce of Liverpool, Manchester, and London, which waited on the Secretary of State for the Colonies, on March 15th. The case was fully laid before Mr. Chamberlain, from the School's point of view, by its delegates.

The outcome of the deputation was an important proposal by Mr. Chamberlain for the formation of a Special Commission, to consist of merchants elected by the Chambers of Commerce of London, Liverpool, and Manchester, who would be authorised to proceed to West Africa in the company of a scientific expert, for the purpose of investigating the whole subject of health and sanitation there, with the various questions involved.

A telegram was received announcing the death, from yellow fever on January 20th, in Pará, of Dr. Walter Myers,

**Death of
Dr. Walter
Myers of the
4th Expedition**

1901

at the age of 29. Dr. Durham also contracted yellow fever, but fortunately recovered, and remained in Brazil until the summer of 1901, continuing his work.

**Foundation of
Walter Myers
Lectureship and
Fellowship** To commemorate the distinguished work of Dr. Myers, it was decided to found a Walter Myers Lectureship, which was to be permanent, and a Walter Myers Fellowship, to be maintained for a period of five years. In addition to these foundations, the School, with the consent of Dr. Myers' parents, erected a tombstone over his grave in Pará, and a memorial bronze in the laboratory of the School in University College, Liverpool, sending a replica of the latter to Birmingham University, as Dr. Myers was a former student at Mason College.

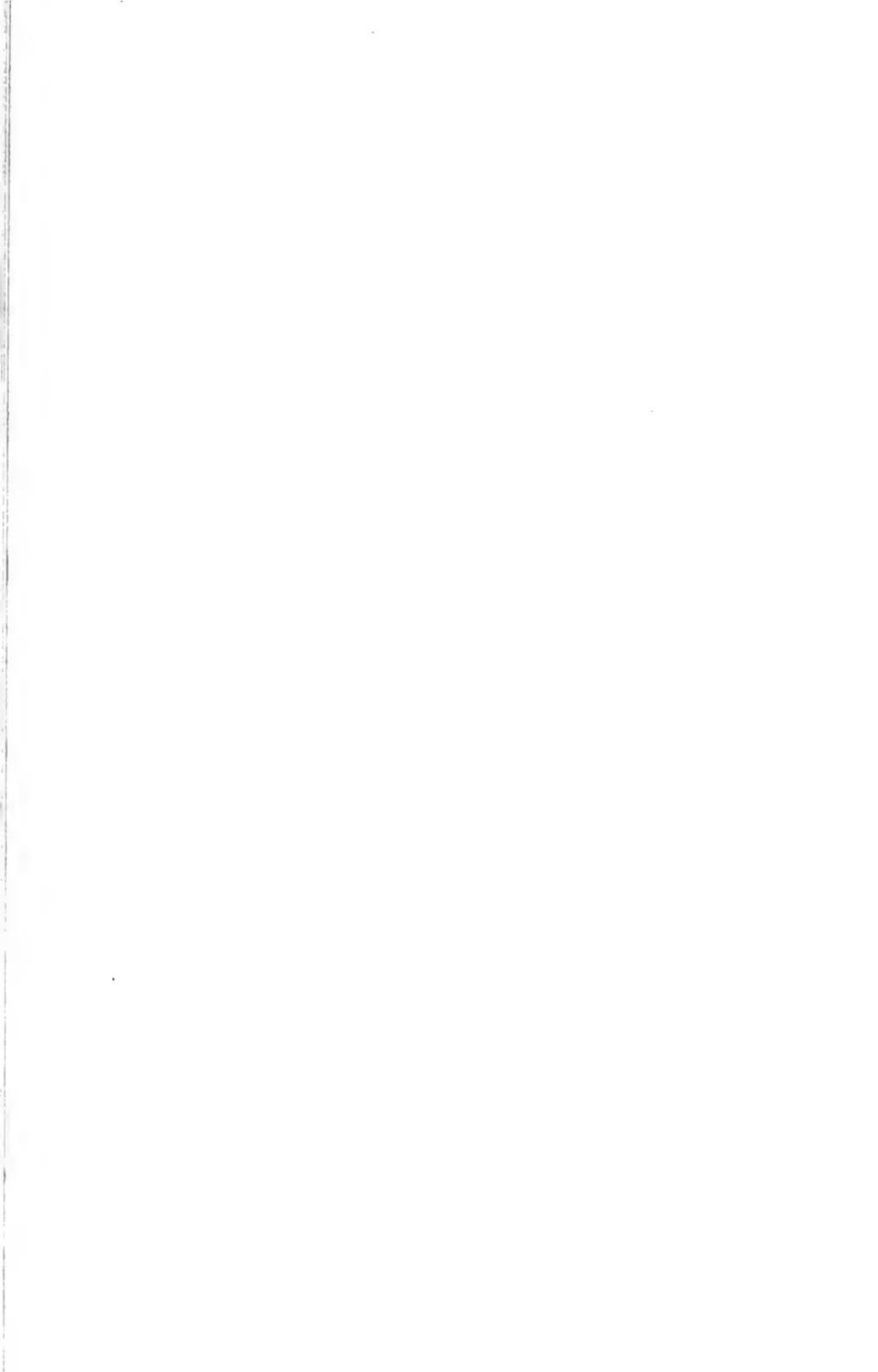
On May 6th, Major Ronald Ross was appointed to the lectureship, and Dr. J. E. Dutton to the fellowship.

5th Expedition On May 6th, Major Ronald Ross announced that Mr. James Coats, jun., of Paisley, had placed £1,000 in his hands unreservedly for the purpose of conducting an expedition to West Africa to endeavour to exterminate mosquitoes from a given district there, and that Mr. Coats wished the expedition to go out under the auspices of the School. The expedition was approved, and Major Ross and Dr. Logan Taylor started for Freetown, Sierra Leone, on June 15th. Dr. C. W. Daniels, Medical Superintendent of the London School of Tropical Medicine, joined the expedition, as did also Dr. Anderson McKendrick, of the Army Medical School.

6th Expedition Major Ross wrote to the School on July 1st, urging that operations similar to those being carried out by the 5th Expedition in Sierra Leone be conducted also in the Gambia and the Gold Coast, and



SECOND LABORATORY OF THE SCHOOL.



accordingly, a 6th Expedition, consisting of Dr. J. E. Dutton, was dispatched to the Gambia on September 21st.

1901

7th Expedition On November 30th, a 7th Expedition, consisting of Dr. Balfour Stewart, was dispatched to the Gold Coast. Dr. Stewart was remunerated from the special funds placed in Major Ross's hands by Mr. Coats.

During the year the Chairman of the School was created a Knight Commander of the Order of St. Michael and St. George, and Major Ross was elected a Fellow of the Royal Society.

The want of a suitable hall of residence for students attending the School had been felt for some time past, and steps were taken in the summer to found such an institution. The Chairman, together with Mr. John Holt and the Hon. R. B. Blaize of Lagos, consented to finance the undertaking, and the School readily sanctioned the project. Two large adjoining houses in Parliament Street, Nos. 44 and 46, were taken as temporary premises and placed under the charge of Dr. H. E. Annett as Warden. The Hall was opened by the Lord Bishop of Liverpool on November 2nd.

Students' Hall
of Residence
opened

In connection with the Hospital, a special out-patient department, for patients suffering from tropical diseases, was opened in October.

Out-patient
Department
at Royal
Southern
Hospital

At a meeting on January 6th, the grant to the University College was increased to £175 per annum.

1902

It was announced that a telegram had been received from Dr. Dutton stating that he had made an important medical discovery, viz.: the identification for the first time of a trypanosome in the blood of man. This parasite was subsequently shewn to be the cause of sleeping sickness and is now known as *Trypanosoma gambiense*, Dutton, 1902.

Important
scientific
discovery

1902

8th Expedition The 8th Expedition, consisting of Major Ross, was dispatched to Sierra Leone on 22nd February.

Resignation of Major Ross

On 3rd April, Major Ross informed the Committee that he had been offered and had accepted a post at the Jenner Institute in London. The resignation was accepted with regret, and Major Ross left the School on April 21st. On 9th June, a letter was received from Major Ross saying that he had definitely resigned his post at the Jenner Institute and wished to become a candidate for the lectureship at the School. It was resolved : (1) That Major Ross be re-appointed to the Walter Myers lectureship at a salary of £500 ; and (2) That steps be immediately taken by the School to raise an endowment of £300 per annum to establish a chair of tropical medicine in University College, to be held by Major Ross in the first instance, in which event the School undertook to raise the salary attaching to the professorship to a minimum of £600 per annum.

Re-appointment of Major Ross

Duke of Northumberland elected Vice-President

On September 8th, the Duke of Northumberland, K.G. was unanimously elected Vice-President of the School.

Resignation of Dr. Annett
Appointment of Dr. Stephens

Dr. Annett tendered his resignation of the post of Demonstrator in Tropical Pathology and Dr. J. W. W. Stephens was appointed to the vacancy on October 6th.

9th Expedition The 9th Expedition of the School consisting of Major Ross, who was accompanied by Sir William MacGregor, K.C.M.G., Governor of Lagos, was dispatched to Ismailia on 11th September.

10th Expedition The 10th Expedition, consisting of Dr. J. E. Dutton and Dr. J. L. Todd, was dispatched to the Gambia and French Senegal on 21st September.



WILLIAM JOHNSTON



11th Expedition The 11th Expedition, consisting of Dr. M. Logan Taylor, was dispatched to the Gold Coast from Sierra Leone, on 11th October. 1902

On December 1st, it was announced that the Nobel Prize had been awarded to Major Ross in recognition of his distinguished work on Malaria. The prize, which was of the value of about £8,000, was formally presented to Major Ross by His Majesty the King of Sweden on December 10th.

Award of
Nobel Prize to
Major Ross

During the year Dr. R. Caton was appointed to represent the Council of the University College on the Committee, Major Ross was made a Companion of the Order of the Bath, and Professor Rubert Boyce a Fellow of the Royal Society.

Alfred Jones Chair of Tropical Medicine A sum of £10,000 having been raised by the School for the purpose of founding a chair of Tropical Medicine in University

College, it was agreed that the money be handed over to the Council of University College for the purpose of immediately establishing such a chair, that the chair be called the 'Alfred Jones Chair of Tropical Medicine,' and that the first holder of the professorship be Major Ross. This gift was accepted by the Council and Major Ross was appointed first professor of Tropical Medicine.

Dr. J. W. W. Stephens was appointed on 5th January, to the Walter Myers Lectureship vacated by Major Ross.

1903

On February 2nd, Mr. J. O. Strafford resigned the post of honorary treasurer, and Messrs. George Brocklehurst and Charles Booth, jun., were appointed joint honorary treasurers.

Appointment of
Major Ross to
Chair of
Tropical
Medicine
Walter Myers
Lectureship

On April 8th, a letter was received from the Colonial Office stating that Mr. Chamberlain was of opinion that all students whose fees were paid by Colonial Governments

1903
Proficiency
Certificate

should pass an examination and obtain a certificate of proficiency. It was resolved to comply with Mr. Chamberlain's wishes in this matter.

Mary Kingsley Medal On April 7th, a recommendation of the Professional Sub-Committee was considered that a medal should be struck in commemoration of the late Miss Mary Kingsley, to be presented by the School from time to time to distinguished scientists who had specialised in the field of tropical medicine and kindred subjects. The designs of Mr. Charles J. Allen and Mr. J. H. McNair were accepted and it was resolved to authorise the striking of the medal, the cost of which was defrayed from funds contributed by Mr. Coats, jun., and Mr. Charles Kingsley.

Opening of Johnston Laboratories These laboratories, which were presented to University College by Mr. William Johnston, were formally opened on 9th May, by the Rt. Hon. Walter Long, M.P., President of the Local Government Board, in the presence of a distinguished company, including a large number of well-known foreign scientists amongst whom were Professors Blanchard, Nocard, v. Hansemann, Perroncito, Bottazzi and Ravenel. The ground floor of the building was devoted to Tropical Medicine and afforded accommodation for about 40 students.

University Charter On July 15th the University Charter was granted.

Dr. Christy and
Dr. Linton
appointed

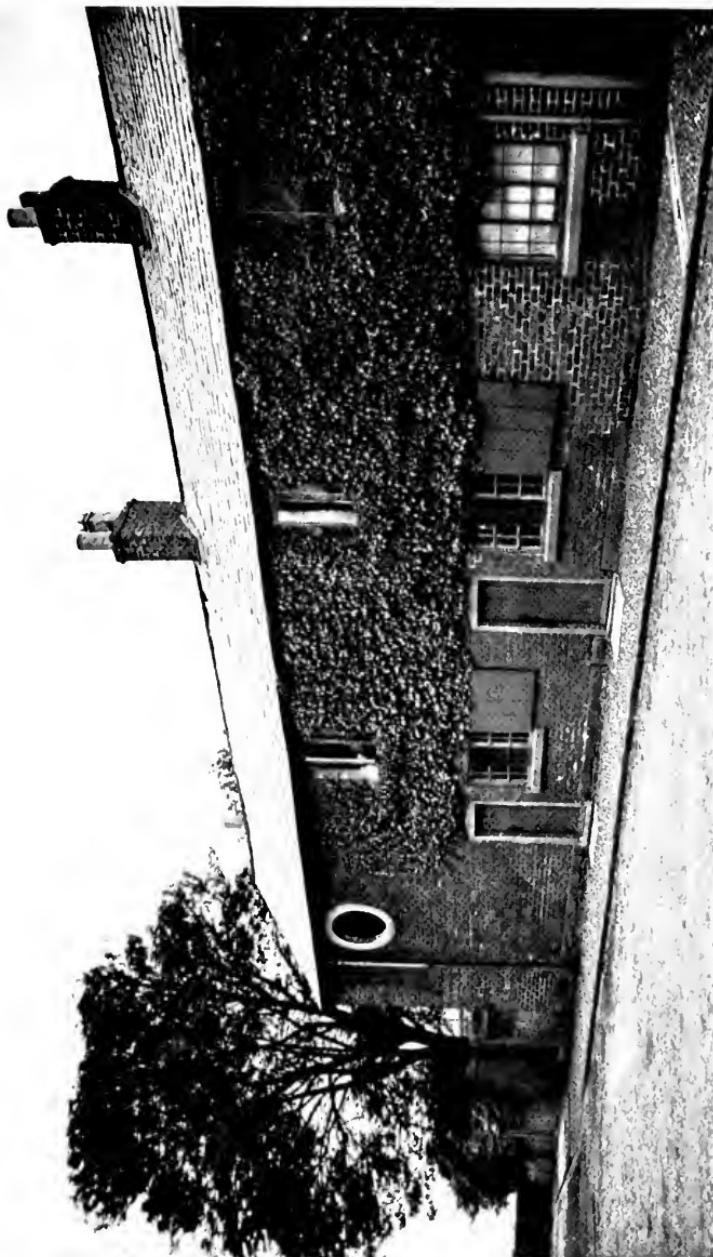
On 6th July, Dr. C. Christy was appointed Assistant Lecturer in the School, and on 27th July Dr. Linton was appointed research assistant at a salary of £100 per annum.

Practical study
of Malaria

On July 6th, the School undertook to print and publish a text book by Stephens and Christophers entitled *The Practical Study of Malaria and other Blood Parasites*.

RUNCORN RESEARCH LABORATORY—EXTERIOR

To face p. 28.





On August 10th, a letter was read from Dr. J. L. Todd, offering £200 for twelve months, and if required for a second period of twelve months, to defray the salary of Dr. Wolferstan Thomas, should the School agree to invite the latter to carry on the work of the Senegambia Expedition in the Johnston Laboratories during the absence of Drs. Dutton and Todd in the Congo. It was resolved to thank Dr. Todd for his most generous offer which was gratefully accepted, and that Dr. Thomas be appointed to the staff of the School.

1903
Gift by
Dr. Todd

Appointment of
Dr. Wolferstan
Thomas

12th Expedition The 12th Expedition, consisting of Drs. J. E. Dutton, J. L. Todd, and C. Christy, was dispatched to the Congo Free State on 13th September. This Expedition was sent out at the request of the Belgian Government which contributed £650 towards the expenses of the Expedition.

On October 5th, it was resolved to write to the Chancellor of the Exchequer and ask him to receive a small deputation to lay before him the claims of the School to receive a grant of £500 a year for five years. On October 20th, a letter was received from the Chancellor of the Exchequer, stating that the application of the School for financial assistance was being dealt with by the Colonial Office. Mr. Lyttleton, Secretary of State for the Colonies, consented to receive a small deputation from the School on November 19th.

On December 7th, Professor Boyce called the attention of the Committee to the fact that the University of Cambridge had established a Diploma in Tropical Hygiene, and suggested that Liverpool should follow suit. It was decided to request the University authorities to consider the desirability of issuing such a Diploma.

Diploma in
Tropical
Hygiene
proposed

During this year Sir William Bowring was appointed

1904 to represent the Council of the University on the Committee.

The Rt. Hon. A. Lyttleton, Secretary of State for the Colonies, inspected the School on March 5th.

A letter, dated March 31st, was read from Dr. Linton tendering his resignation as research assistant.

On 11th April, a new prospectus (the second) of the School was issued.

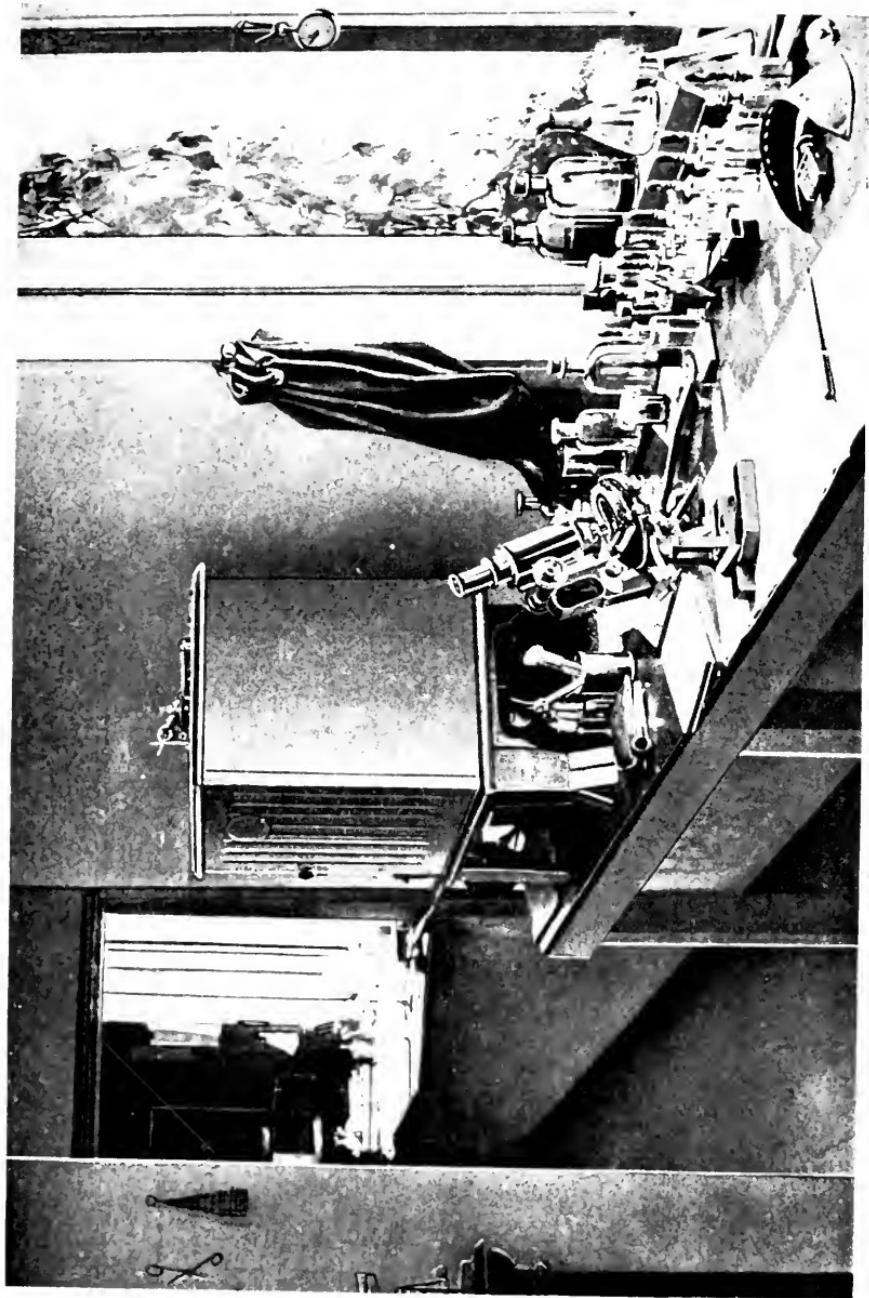
On May 9th, the attention of the Committee was drawn to the fact that the assets of the School totalled only £90, whereas the liabilities to December 31st—on the current scale—would be about £1,000 for that period. It was further pointed out that this did not include the expenses incident to the Congo Expedition. It was resolved to recommend the Professional Sub-committee to consider the advisability of the Expedition being recalled, and the work on trypanosomiasis stopped, in view of the heavy expense entailed thereby. The report of the Professional Sub-committee on the matter was as follows :—

'That, after careful consideration of the expenses incurred on account of the Congo Expedition of the School, and the Trypanosomiasis research work carried on in connection therewith, the Sub-Committee are of opinion that the work cannot be carried on at much less expense than £2,000 a year. They consider it would take two more years to bring the experiments to a successful conclusion. They are strongly of opinion that this special work is most valuable and should be continued if possible.'

'They recommend the general Committee, therefore, to issue a special appeal to the Public, calling attention to this branch of research, and asking for the necessary funds. The Committee recommend that a limit of time should be named, say August 1st, and, if by that date there does not seem much probability of collecting the whole, or a sufficient proportion of the amount required, they must then reluctantly recommend the General Committee to recall the Congo Expedition, and abandon the Trypanosomiasis research work on the scale now carried on in Liverpool.'

On June 20th, it was resolved after careful consideration that the Honorary Secretary be instructed to inform

RUNCORN RESEARCH LABORATORY



1904

the Staff at the Johnston Laboratories that no more money was available for expenditure on animals, instruments, etc., and that for the present no further expenditure in this direction, on the part of the professional staff of the School, should be incurred.

On the appeal of Professor Boyce, it was resolved to reconsider this decision at the next meeting.

On July 4th, it was decided to apply to the Bank for an overdraft of £500.

On 11th July, the Chairman announced that he had a sum of £500 to hand over to the School.

In September the School Laboratories at Runcorn were established for the purpose of maintaining strains of trypanosomes and spirochaetes, and other important pathogenic parasites which had been collected by the Expeditions of the School. Dr. Annett was instrumental in obtaining the premises which were placed under the charge of Dr. Thomas with an assistant research staff.

Runcorn
Research
Laboratories

On 5th September, the Honorary Secretary asked for instructions regarding the recalling of the Congo Expedition. The Chairman read a letter from Professor Boyce pointing out that an arrangement had been made at the laboratory whereby the expenses there in connection with the Expedition could be kept within the grant of £5 a week, and that consequently the only other expense was the salaries of the Expedition. He considered that it would be of the greatest advantage to allow the Congo Expedition's work to go on. Sir Alfred Jones said he had hopes of inducing H.M. the King of the Belgians to give more money, and suggested that the Committee should postpone consideration to another meeting.

On October 3rd, the Chairman announced that he would shortly interview H.M. the King of the Belgians on

1904

the subject of further funds for the Expedition, and the question of recalling it was therefore postponed.

On November 7th, it was resolved that the attention of the Council of the University of Liverpool be drawn to the condition of the finances of the Liverpool School of Tropical Medicine ; and that in consideration of the services rendered to the University by the School and of the increasing difficulty experienced in raising the large annual sum required for the conduct of the School on its present scale, the University be asked to relieve the School of the expenses incurred in the maintenance of the University Laboratories, set apart for the use of the School, which expenses at present amount to a sum of £620 per annum.

Government
grant

A letter was read from the Colonial Office dated November 4th, offering the School £500 a year to be devoted to some special object approved by the Advisory Board for the Tropical Diseases Research Fund. It was resolved to accept the offer, and to formulate later the objects on which the money will be spent, such objects to be determined by the Professional Sub-committee and the Finance Sub-committee.

On November 7th, a letter was read from Dr. Grünbaum resigning his honorary lectureship.

In September, Major Ross paid a visit of inspection to the Panama Canal, where he was the guest of the Canal Commission.

13th Expedition The 13th Expedition of the School, consisting of Professor Boyce, Dr. Arthur Evans, and Dr. Herbert Clarke, was dispatched to Bathurst, Conakry and Freetown on 14th November.

14th Expedition The 14th Expedition, consisting of Lt.-Col. G. M. Giles, I.M.S., and Dr. R. E. McConnell was dispatched to the Gold Coast on 31st December.



J. EVERETT DUTTON

**Diploma in
Tropical
Medicine
established**

A Diploma in Tropical Medicine was established by the University during this year.

1904

On January 10th to 12th, Her Royal Highness Princess Christian visited the School, accompanied by the late Secretary of State for the Colonies, the Rt. Hon. Joseph Chamberlain. She was invited to become Honorary President of the School, and on February 13th graciously consented to accept the position.

1905

**Visit of H.R.H.
Princess
Christian**

**Incorporation
of the School**

The Committee being of the opinion that the time had arrived when the School should be incorporated, steps were accordingly taken for that purpose, and the School was duly incorporated on 30th January.

It was with the deepest regret that the Committee learned of the sudden death on February 27th, of Dr. Dutton, Walter Myers Fellow, at Kasongo, on the Congo, while actively engaged in the investigation of trypanosomiasis and tick fever. In 1903, Dr. Dutton, accompanied by Dr. Todd, had proceeded to the Congo to investigate trypanosomiasis and other tropical diseases. Towards the end of 1904 they had reached Stanley Falls, and independently they were able to demonstrate the cause of tick fever in man—a discovery made a few weeks previously by Ross and Milne in the Uganda Protectorate. Further, they were able to prove the transference of the disease from man to monkeys by means of a particular species of tick. During these investigations both observers contracted the disease. The last letter from Dr. Dutton was dated Kasongo, February 9th, when he seemed in excellent spirits. By his death, the Tropical School and the University suffered the loss of a most brilliant graduate. Although

**Death of Dr.
J. E. Dutton**

**Discovery of
cause of Tick
Fever**

1905

only twenty-nine years old, he had already won a recognised position throughout the scientific world.

Mr. R. Newstead appointed to the staff

On April 1st, Mr. R. Newstead, Curator of the Grosvenor Museum, Chester, for nineteen years, was appointed Lecturer in Economic Entomology and Parasitology, at a salary of £250 per annum.

15th Expedition The fifteenth Expedition, consisting of Dr. H. Wolferstan Thomas and Dr. Anton Breinl, John Garrett International Fellow in Bacteriology, was dispatched to the Amazon on 19th April, to study yellow fever.

Mary Kingsley Medal

The first recipients selected for the medal were Sir Patrick Manson, K.C.M.G., Colonel Bruce, C.B., Dr. Laveran and Professor Koch. In the case of the first two, the medals were personally presented on July 1st, by Her Royal Highness Princess Christian, at Schomberg House. As Dr. Laveran was unavoidably prevented from attending, a representative of the French Embassy received it for him. Professor Koch was absent in East Africa, and it was arranged to make the presentation of his medal through the British Ambassador in Germany.

Grant from University

On August 14th, a letter, dated 20th July, was read from the Vice-Chancellor of the University of Liverpool, stating that the Council of the University would make a grant to the School of £200 per annum.

16th Expedition The 16th Expedition, consisting of Professor Boyce, was dispatched on August 4th to New Orleans, to study yellow fever. Later, at the request of the Colonial Office, Professor Boyce visited British Honduras.

Dr. Todd and Dr. Breinl appointed to the staff

On December 11th, Dr. Todd and Dr. Breinl were appointed assistant lecturers to the School. Dr. Todd had recently returned from the Congo Expedition, and Dr. Breinl



MARY KINGSLEY
OBITUARY 1900



DEVOTION TO SCIENCE

HYDE PARK SCHOOL
TROPICAL
EDITIONS

THE MARY KINGSLEY MEDAL

had been invalidated home from the Amazon Expedition in September, as the result of a severe attack of yellow fever ; on his way home he was shipwrecked and lost all his personal effects.

The first edition of this textbook of the School having been exhausted, a second revised and enlarged edition was published.

On April 3rd, it was resolved that Dr. J. L. Todd be appointed Director of Tropical Research at the Runcorn Laboratory.

17th Expedition The 17th Expedition of the School, consisting of Professor Ross, C.B., was dispatched on May 20th, to Lake Copais, in Greece, to study malaria at the request of the Lake Copais Co. After his return from his mission, Professor Ross suggested that the School should collect funds to assist the Greek Anti-Malaria League in its campaign against malaria. The proposal met with the approval of His Majesty the King of Greece, Her Royal Highness Princess Christian (Honorary President of the School), and other distinguished personages. A fund was started, and was well supported. In this connection, the Physician of the King of Greece, Dr. Savas, visited the School in the autumn.

On 23rd August, His Majesty the King of the Belgians gave an audience to Sir Alfred Jones, Professor Ross, Professor Boyce, Dr. Stephens, Mr. R. Newstead, Dr. Todd, Dr. Evans, and Mr. A. H. Milne, at the Palace in Brussels, when the question of the prevention of sleeping sickness was fully discussed. After the audience His Majesty entertained the deputation at luncheon, when he conferred the Order of Leopold II on Professor Ross, Professor Boyce, and Dr. Todd, for their services in the cause of Tropical Medicine.

1905

'Practical study
of Malaria'

1906

Appointment of
a Director
of the Runcorn
Research
LaboratoryDeputation
received by
H.M. the King
of the Belgians

1907
Finance

Munificent gifts
from the Congo
Free State and
from H.M. the
King of the
Belgians

On February 5th, it was resolved that the Chairman of the School should make a personal application to the Colonial Office for an increase of the grant. It was announced that the amount owing by the School to the Congo Free State for housing and transport of the 12th Expedition was 35,525 francs. On March 5th, a special appeal for funds was issued. On 11th June, a letter was read from the Secretary-General of the Congo Free State, to the effect that the Government of that State released the School from payment of the sum owing to them. On 13th August, the Secretary reported that the School was overdrawn at the Bank to the extent of £200, and it was resolved to make a special effort to raise the money required.

It was announced on October 8th, that His Majesty the King of the Belgians had made the munificent gift of £1,000 to the general funds of the School.

On 30th April, Dr. J. L. Todd, Director of the Runcorn Research Laboratories, left the School to take up the post of Associate-Professor of Parasitology at McGill University, Montreal.

18th Expedition The 18th Expedition of the School, consisting of Dr. Alan Kinghorn, Johnston Colonial Fellow, 1905, and Mr. R. E. Montgomery, was dispatched to Rhodesia and British Central Africa, on May 5th. The Colonial Office subscribed £250 towards the expenses of the Expedition, and sanctioned the expenditure of a sum of £100 from the funds of the British Central Africa Protectorate. The British South Africa Company offered free transport and quarters whenever available, and a subsistence allowance of 10/- daily to each of the members whilst working in their territories.

On 14th May, Dr. A. Breinl was appointed Director of the Runcorn Research Laboratory, at a salary of £250 per annum.

Dr. Breinl
appointed
Director of
Runcorn
Laboratory

On 3rd June, it was resolved to increase the salary of the Alfred Jones Professor of Tropical Medicine by £100 per annum.

1907

Professor Ross's
salary

19th Expedition The 19th Expedition of the School, consisting of Dr. Barratt and Dr. Yorke, was dispatched on August 14th to Nyasaland, to study blackwater fever. The Colonial Office contributed a grant of £500 towards the expenses of this Expedition, and free passages to Chinde were provided by the German East Africa Line.

20th Expedition The 20th Expedition, consisting of Professor Ross, C.B., was dispatched to Mauritius to study malaria at the request of the Colonial Office, in October. The cost of the Expedition was defrayed by the Colonial Office.

On October 8th, it was resolved to place on record the anxiety of the School with regard to Professor Boyce's illness and its sincere hope for his recovery.

Illness of
Professor
Boyce.

During the year, Mary Kingsley Medals were awarded to Professor Danielewsky, Dr. Charles Finlay, Mr. W. M. Haffkine, Professor Golgi, Colonel Gorgas, Professor Looss, and Professor Theobald Smith. Mr. Haffkine was presented with his medal at a dinner given in his honour by the Chairman of the School on 21st October. In the other cases, the medals were handed to the recipients by His Majesty's representatives at the places where they resided.

Awards of
Mary Kingsley
Medals

The general expenditure during this year, owing chiefly to the dispatch of the Sleeping Sickness Expedition to Rhodesia and British Central Africa, was very heavy, necessitating a bank overdraft of nearly £700. The second appeal for funds for the purpose of the Yellow Fever Expedition to Manáos, in 1905, resulted in over £1,000 being raised for that Expedition. The Congo Free State

Finance

1907

again made a most generous gift to the School of £400, chiefly for the work on sleeping sickness.

**Alteration in
course of
instruction**

On 14th October, it was decided, in view of the recent great advance in tropical medicine, that the time had now arrived when the curriculum of teaching on the subject should be extended, and it was therefore resolved (1) that the Autumn and Lent Courses, which were at present of only ten weeks' duration, should be extended to thirteen weeks, and (2) that in order to allow this change the Summer Term should be replaced by a short course of practical instruction in tropical pathology and medical entomology, lasting for four weeks during the month of June. This alteration had the approval of the Colonial Office.

**Professor
Boyce
Knighted**

On November 9th, Professor Boyce was knighted in recognition of his distinguished services.

**Visit of H.R.H.
the Princess of
Wales**

Her Royal Highness the Princess of Wales paid an informal visit to the School on November 29th.

**Annals of
Tropical
Medicine and
Parasitology**

Up to this date, the scientific work of the School had been published in a series of Memoirs, twenty-one in number. On

November 5th, 1906, it was decided to alter the style of the publication, and that future papers should appear in a journal, *The Annals of Tropical Medicine and Parasitology*. The first number was issued on 1st February, and the journal was entered at Stationers' Hall on 23rd February.

On 31st December, a letter was received from the Honorary Treasurer, Mr. George Brocklehurst, relinquishing his post.

**Awards of
Mary Kingsley
Medals**

In January, Mary Kingsley Medals were presented to the Rt. Hon. Joseph Chamberlain, M.P., and the Rt. Hon. Lord Lister.

THE UNIVERSITY OF LIVERPOOL

ANNALS
OF
TROPICAL MEDICINE AND
PARASITOLOGY

ISSUED BY THE
LIVERPOOL SCHOOL OF TROPICAL MEDICINE

Edited by

PROFESSOR J. W. W. STEPHENS, M.D.Cantab., D.P.H.

PROFESSOR R. NEWSTEAD, M.Sc., J.P., F.R.S., A.L.S., F.E.S., Hon. F.R.I.H.S.

PROFESSOR WARRINGTON YORKE, M.D.

VOLUME XIII

(May 12, 1919, to March 15, 1920)

*With Frontispiece, twelve plates, forty-six figures in text, thirty-one charts,
and three maps*

LIVERPOOL:
AT THE UNIVERSITY PRESS, 57 ASHTON STREET

Lord Stanley, K.C.V.O., kindly consented to act as Honorary Treasurer in succession to Mr. George Brocklehurst. Later in the year, he succeeded to the title of Earl of Derby, and Mr. Alec Rea was then appointed in his stead. The position of Vice-President to the School was accepted by the Right Honourable the Earl of Derby.

1908
Appointment of
Treasurer

In February, Mr. William Adamson, who had been Vice-Chairman of the School since its foundation, resigned the position on the ground of ill-health.

Earl of Derby
appointed
Vice-President

In April, Mr. F. C. Danson was appointed Vice-Chairman.

Mr. F. C.
Danson
appointed
Vice-Chairman

On 4th February, Dr. Nierenstein, John Garrett International Fellow, 1906-8, who was devoting all his time to work in the interests of the School, was appointed Research Demonstrator at the Runcorn Laboratories, and was subsequently given an additional salary of £50 per annum.

Government
grant increased

On April 1st, the Government grant to the School was increased from £500 to £1,000, and the Secretary of State for the Colonies sanctioned grants of £250 each from the East Africa Protectorate and Uganda towards the large expenditure incurred in keeping the Sleeping Sickness and Blackwater Fever Expeditions in Africa till the end of the year.

21st Expedition The 21st Expedition, consisting of Mr. R. Newstead, Dr. W. T. Prout, and Dr. Alan Hanley, C.M.G., late P.M.O. Southern Nigeria, was dispatched to Jamaica, on November 14th, to study cattle and other ticks.

Resignation
of Mr. Hindle

Mr. E. Hindle, who had been Research Assistant at Runcorn, severed his connection with the School on November 24th.

Franco-British
Exhibition

An invitation was sent to the School to exhibit specimens at the Franco-British Exhibition, to be held in London.

1908 The Committee accepted the invitation, and Dr. J. W. W. Stephens and Mr. R. Newstead were asked to prepare a suitable exhibit. This exhibit was collected and carefully arranged by them, and attracted much attention in the Medicine and Surgery Section of the Exhibition, the School being awarded a Diploma for the Grand Prize by the Exhibition Committee.

Mr. R. Rankin

During this year, Mr. Rankin was appointed on the Committee and Dr. C. Macalister replaced Prof. W. Carter, as representative of the Southern Hospital.

1909

**Gift of Sir
Edward Durning-
Lawrence**

On 24th May, it was announced that Sir Edward Durning-Lawrence had given £500 for 'cold-air treatment' of tropical diseases, and had promised another £500, if necessary. All arrangements for conducting the experiments were left in the hands of Major Ross.

On 22nd April, Dr. Nierenstein resigned his post of Research Demonstrator.

On May 24th, Dr. Warrington Yorke was appointed Research Assistant at the Runcorn Laboratory.

On June 1st, Dr. Kinghorn tendered his resignation, and Dr. Barratt also left the School at this time, but was subsequently appointed Honorary Lecturer.

22nd Expedition The 22nd Expedition, consisting of Sir Rubert Boyce, was dispatched to the West Indies in March to initiate a campaign against mosquitoes at the request of the Colonial Office. As a result of this visit, he produced a book, entitled *Mosquito or Man*, of which the first edition was rapidly exhausted, and a second issued.

On October 1st, Dr. A. Breinl resigned his position as Director of the Runcorn Research Laboratory to take up the position of Director of the newly-formed Institute of Tropical Medicine, in Queensland, Australia.

**Dr. Yorke
appointed to
Runcorn**





COMMEMORATIVE DIPLOMA

Dr. Warrington Yorke was appointed Director of the Runcorn Laboratory.

1909

Dr. Yorke
appointed
Director

23rd Expedition The 23rd Expedition, consisting of Dr. J. W. W. Stephens, was dispatched to Egypt, in November, to study helminthology.

Death of Sir Alfred Jones On 13th December, Sir Alfred Jones, K.C.M.G., the founder of the School, died. At a special meeting of the Committee and staff of the School, on December 15th, the following resolution was passed :—

'That the Committee and Staff of the Liverpool School of Tropical Medicine desire to place on record their inexpressible sorrow at the death of their founder, chairman, and well-beloved colleague, Sir Alfred Jones. His loss will be felt nowhere so keenly as in those homes in England where a father or a son is facing in the tropics the greatest risk of life in the service of country and Empire. The foundation of the Liverpool School of Tropical Medicine will be handed down as not the least of the many noble achievements of a great man.'

On January 24th, Mr. W. H. Lever was appointed Chairman of the School in succession to the late Sir Alfred Jones, K.C.M.G.

In May, Viscount Milner, Lord Pirrie, Sir Owen Philipps, and Mr. O. Harrison Williams were elected Vice-Presidents of the School.

24th Expedition The 24th Expedition of the School, consisting of Mr. R. Newstead, was dispatched to Malta on June 25th, to conduct investigations on sandflies.

25th Expedition The 25th Expedition of the School, consisting of Sir Rubert Boyce, was dispatched to West Africa in June, at the request of the Colonial Office, to report on yellow fever at Sierra Leone and on the Gold Coast.

1910

Mr. W. H. Lever
appointed
Chairman

New Vice-
Presidents

1910

26th Expedition The 26th Expedition of the School, consisting of Dr. Wolferstan Thomas, who had returned from Manáos in March, 1909, was dispatched to the Amazon in May to continue the study of yellow fever and other diseases.

The Society of Tropical Medicine and Hygiene held their Annual Meeting at Liverpool, on 25th June, when the Chairman of the School entertained the members to a banquet.

In June, Mr. Henry F. Carter was appointed Assistant Lecturer in Entomology.

The Chairman of the School presented to the Committee a portrait of the late Sir Alfred Jones, painted by Mr. Tennyson Cole, which now hangs in the laboratory.

The School was invited to send an exhibit to the Japan-British Exhibition in London. The invitation was accepted, and the exhibits prepared by Dr. Stephens and Mr. Newstead were awarded a commemorative Diploma.

In addition to the annual grant of £1,000, an additional grant of £900 was made by the Government for special researches in malaria fever.

The following awards were made during the year:— Honorary recipients: Prince Auguste d'Arenberg, Mrs. Pinnock, Mr. William Adamson, Professor William Carter. Recipients: Sir William MacGregor, G.C.M.G., Professor R. Blanchard, Dr. A. Breinl, Professor Angelo Celli, Dr. C. W. Daniels, Surgeon-General Sir Alfred Keogh, Colonel W. G. King, Professor Dr. Nocht, Professor G. H. F. Nuttall, Major Leonard Rogers, Professor J. L. Todd, Surgeon-General Walter Wyman. The Chairman on 25th June, gave a banquet to the recipients of the medal.

The Liverpool University Institute of Commercial Research in the Tropics went into liquidation during the year, and the liquidator, Mr. T. F. Harrison, transferred

Visit of the
Society of
Tropical
Medicine

Assistant
Lecturer in
Entomology

Portrait of
Sir Alfred
Jones

Japan-British
Exhibition

Government
grant

Mary Kingsley
Medallists

Gift from the
Institute of
Commercial
Research in
the Tropics



LORD LEVERHULME

to the School the premises rented by the Institute at 5, Bedford Street, together with all the apparatus and furnishings therein, and the balance of the funds belonging to the Institute. The services of Mr. E. S. Edie, late Director of the Institute, were retained by the School, as chemist.

1910

**Dutton
Memorial
Chair**

During the past four or five years, the School had gradually collected the sum of £10,000 for the foundation of a Chair of Tropical Entomology, in memory of the late J. Everett Dutton. On December 12th, it was resolved to pay over this sum to the University of Liverpool, and to guarantee an annual grant of £100 for five years towards the Chair on its foundation.

On 4th January, Dr. John Gordon Thomson was appointed Research Assistant in Cryotherapy, Dr. G. C. E. Simpson, Research Assistant in Chemistry, and Mr. W. R. Drawz, Librarian.

1911

Dr. J. G.
Thomson
Dr. Simpson
and Mr. Drawz

On February 8th, Mr. H. B. Fantham was appointed as Research Worker on Parasitology.

Dr. Fantham

In April, Dr. R. W. Nauss was appointed Research Assistant at the Runcorn Laboratories.

Dr. R. W. Nauss

In September, Mr. Walter Stott was appointed as Honorary Statistician to the School.

Mr. W. Stott

Dr. David Thomson was appointed Research Assistant in Malaria.

Dr. D. Thomson

27th Expedition The 27th Expedition of the School, consisting of Professor J. L. Todd and Professor S. B. Wolbach, was dispatched to the Gambia to investigate sleeping sickness, in January.

**Establishment
of Yellow
Fever Bureau** On March 13th, Sir Rubert Boyce stated that he had succeeded in raising funds for the establishment of a Yellow Fever Bureau in the School, and submitted a statement explaining

1911

its objects and workings. It was accordingly resolved to establish such a Bureau, with Dr. Harald Seidelin as Director, at £300 per annum. The publication of the Bureau, *The Yellow Fever Bulletin*, was first issued in May.

Dutton Memorial Chair
Mr. R. Newstead was unanimously elected to the Dutton Memorial Chair of Entomology in April.

Dr. Blacklock
In April, Dr. Blacklock was appointed Research Assistant at Runcorn in succession to Dr. Nauss.

Dr. Fantham
On 29th May, Dr. H. B. Fantham was appointed Assistant Lecturer in Parasitology.

Death of Sir Rubert Boyce The death of Professor Rubert Boyce, Dean of the School, occurred on June 16th.

Honour to Chairman
On June 19th, the following resolution was passed :—

'The Incorporated Liverpool School of Tropical Medicine desire to place on record their heart-felt sorrow at the irreparable loss that the School have sustained by the unexpected and premature death of Sir Rubert Boyce. The School recognise that his early death is due to his unflinching devotion to duty in the face of the severest physical disabilities, and to overtaxing his strength in the cause of humanity. They feel that where they have lost a personal friend and a loyal colleague, the Empire and the World at large have lost a far-seeing scientist whom it will be difficult to replace. The School feel that their sorrow is shared by all, and especially by those whose work lies in unhealthy tropical regions.'

Death of Mr. William Adamson
In June, Mr. W. H. Lever, Chairman of the School, was created a Baronet.

The death of Mr. Adamson, first Vice-Chairman of the School, having taken place, on 9th October, the following resolution was passed :—

'The Incorporated Liverpool School of Tropical Medicine desire to place on record an expression of their high appreciation of the valuable work that the late Mr. William Adamson accomplished in his capacity as Vice-Chairman of the School. They especially appreciate the whole-hearted and self-sacrificing manner in which Mr. Adamson devoted his life to the alleviation of suffering. They trust that his widow and family will derive consolation from the knowledge of the good work he performed in his life-time.'



THE RUBERT BOYCE MEMORIAL.

The School was requested to send an exhibit to this Exhibition. It was decided to accede to this request, and Dr. Stephens and Professor Newstead arranged an exhibit which gained a Diploma of Merit.

1911
Dresden
International
Hygiene
Exhibition

In June, leave of absence was granted to Professor Newstead to join the Royal Society Sleeping Sickness Commission in Nyasaland.

Sleeping
Sickness
Commission of
the Royal
Society

On July 20th, leave of absence was granted to Dr. Warrington Yorke to join the Sleeping Sickness Commission of the British South Africa Company to North-Eastern Rhodesia. Dr. Blacklock was appointed Acting-Director of the Runcorn Laboratories during Dr. Yorke's absence.

28th Expedition The 28th Expedition of the School, consisting of Dr. Harald Seidelin, was dispatched to Yucatan to study yellow fever, in December.

Dr. David Thomson was appointed Clinical Pathological Assistant.

On July 22nd, the Chairman of the School entertained the members of the Tropical Section of the British Medical Association to a dinner.

1912
Visit of British
Medical
Association to
Liverpool

29th Expedition The 29th Expedition of the School, consisting of Dr. David Thomson, was dispatched in September to Panama, to study malaria.

On October 14th, a letter was received from Sir Ronald Ross resigning his appointment as Alfred Jones Professor of Tropical Medicine.

Resignation of
Major Ross

An Unendowed Chair of Tropical Sanitation having been established by the University at the request of the School, Sir Ronald Ross was appointed to the post for a term of five years. On October 21st, it was resolved, subject to the approval of the University, that the School

Professorship
of Tropical
Sanitation

1912

Government grant

retain the services of Sir Ronald Ross, as Lecturer, at a remuneration of £400 per annum for a period of five years.

The School again received a grant of £1,000 from the Colonial Office, and an additional grant of £200 for chemical researches.

30th Expedition The 30th Expedition, consisting of Dr. H. Seidelin, was dispatched to Jamaica, in December, to study vomiting sickness and other obscure tropical diseases.

In this year, Mr. H. J. Read, C.M.G. was appointed to represent the Colonial Office on the Committee.

Professor Newstead was awarded a Diploma of Honour and Gold Medal at the Royal International Horticultural Exhibition, London, 1912, for a collection of scale insects (*Coccidae*).

1913

Sir Ronald Ross' visit to Cyprus

At the request of the Colonial Office, Sir Ronald Ross visited Cyprus in January-April, to advise on the question of malaria.

On 13th January, a statement was received from Mr. O. Harrison Williams, the executor of the late Sir Alfred Jones, regarding the allocation of a large sum of money to the School :—

SIR ALFRED LEWIS JONES, *Deceased*

INTERIM CHARITABLE SCHEME

1. The sum of £30,000 shall be paid to the Incorporated Liverpool School of Tropical Medicine (hereinafter referred to as 'the said Association') and a further sum of £40,000 shall be paid to the said Association out of the moneys appropriated to answer the annuities payable out of the Testator's Estate (hereinafter called 'the annuity fund') as and when the same shall cease to be applicable to the payment of the said annuities or at such earlier date and from such other source as the Trustees or Trustee for the time being of the Will of the said Testator shall think fit. Any moneys paid to the said Association out of the Residuary Estate of the above-named Testator under this Clause shall form a fund

Gift from the estate of the late Sir Alfred Jones

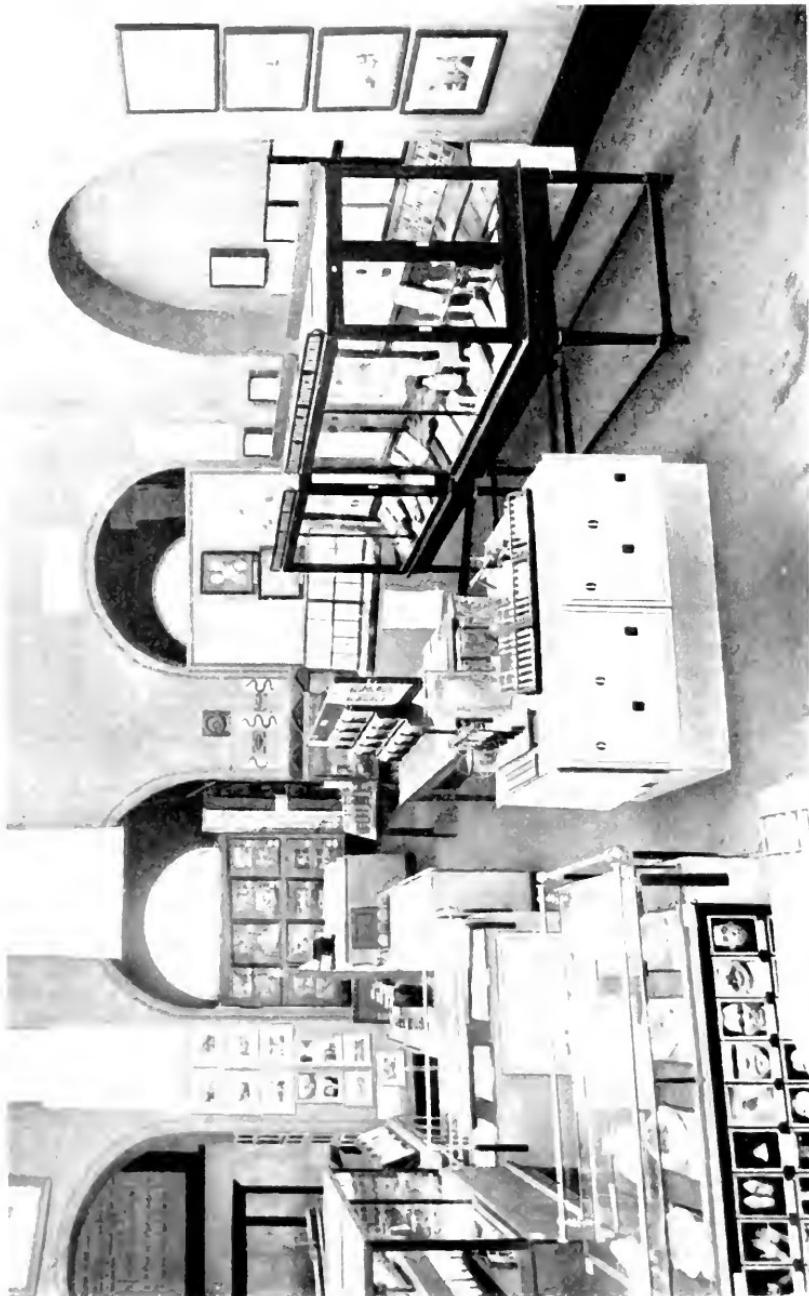
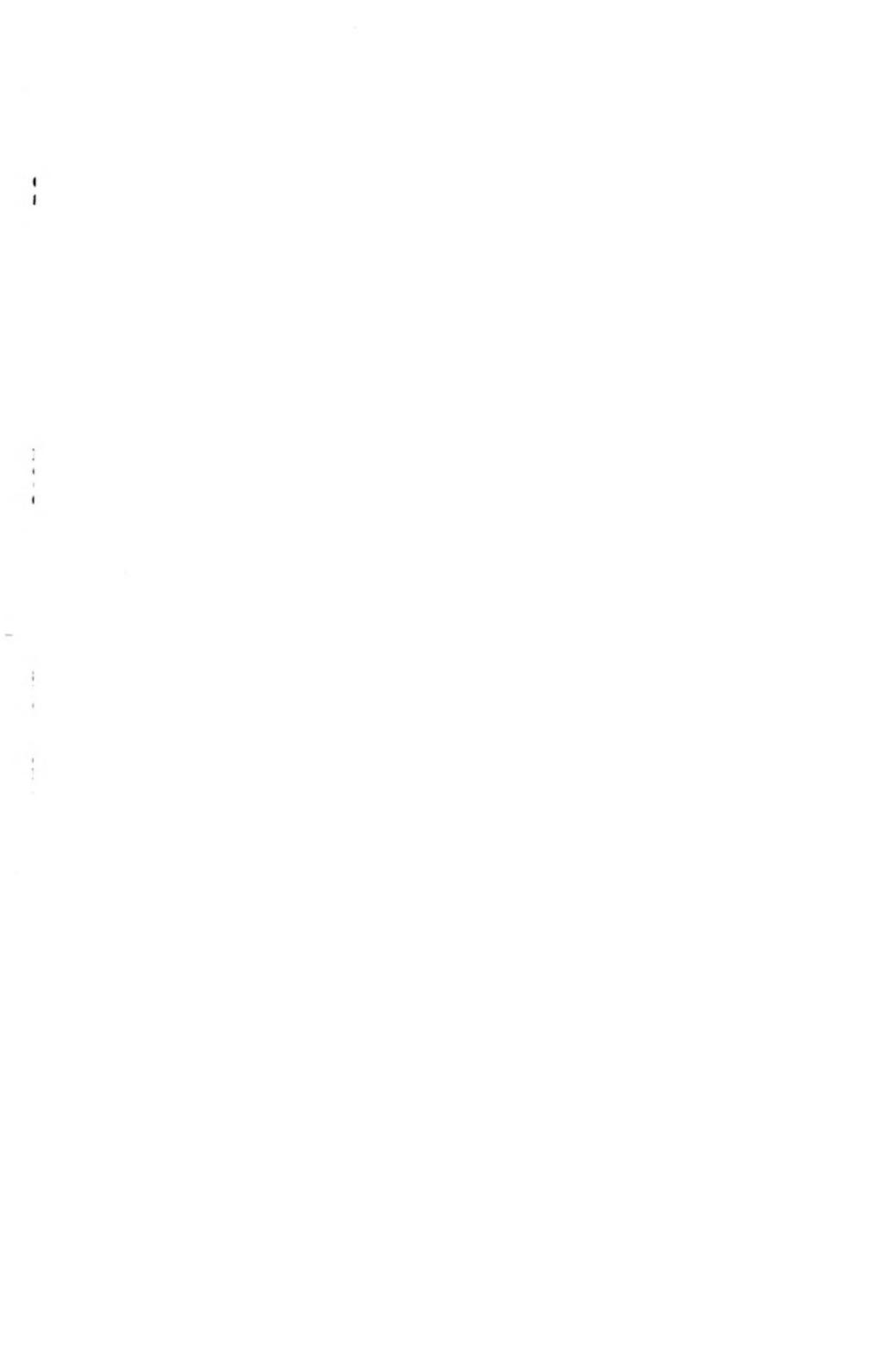
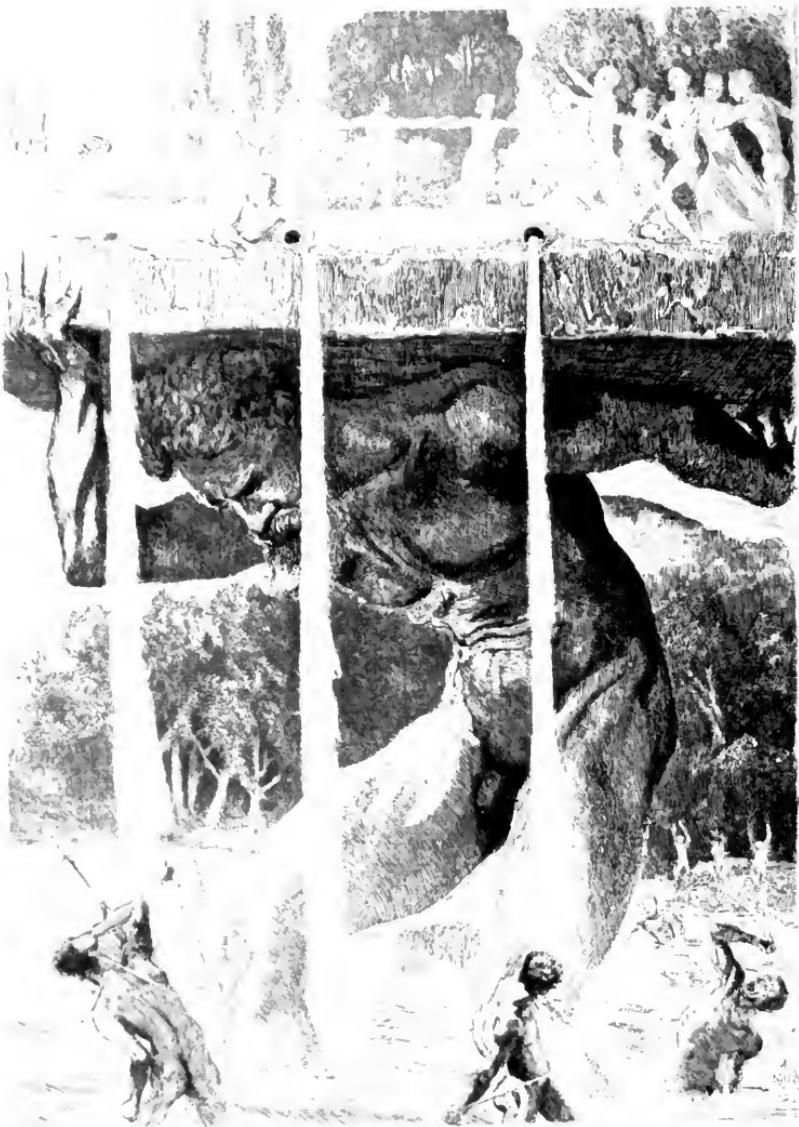


EXHIBIT OF LIVERPOOL SCHOOL OF TROPICAL MEDICINE, DRESDEN





EHRENUHRKUNDE FÜR FÖRDERUNG DER
FESTAUFTRÄGE DER STUDENTEN DRESDEN 1911
VON ALLEGORISCHEM MATERIALE

To face p. 46. 2

1913

to be called 'The Sir Alfred Lewis Jones Bequest' and shall be applied at the discretion of the Committee of the said Association :—

- (1) As to part thereof (not exceeding £5,000) in defraying the cost of the erection of a new wing or ward at the Liverpool Royal Infirmary for the reception of persons suffering from Tropical Diseases such wing or ward to be called 'The Sir Alfred Lewis Jones Tropical Ward.'
- (2) As to part thereof not exceeding £20,000 in the erection of new premises in Liverpool to be used for the furtherance of the study of Tropical Medicine and to be permanently associated with the name of the said testator.
- (3) As to the residue thereof as a permanent endowment for the general purposes of the said Association.

2. The further sum of £10,000 shall be paid to the said Association for the purpose of being applied at the discretion of the Committee of the said Association in or towards the erection and equipment of a Laboratory in the Colony of Sierra Leone, West Africa, to be called 'The Sir Alfred Lewis Jones Tropical Laboratory' to be used for research study and instruction in connection with the origin character alleviation prevention and cure of tropical diseases such Laboratory to be vested in and under the control of the said Association.

If it shall be impracticable or inexpedient to erect the said laboratory in the said Colony the said sum of £10,000 shall on or before the 25th day of March, 1916, be re-paid to the Plaintiff or other the Trustees or Trustee for the time being of the Will of the above-named Testator with the intermediate income thereof and shall sink into his residuary estate.

**New Buildings
of the School—
The Sir Alfred
Lewis Jones
Laboratory** Arrangements were made with the University of Liverpool to acquire a site in Pembroke Place for a new building for the purpose of the School, the cost of the building to be defrayed out of the above funds. Plans which had been prepared, were approved.

**New Tropical
Ward—The
Sir Alfred Lewis
Jones Tropical
Ward** Arrangements were made with the Royal Infirmary for the erection of a new tropical ward in the Infirmary grounds, the cost to be defrayed out of the above funds. Plans were submitted and approved.

1913

**Walter Myers
Chair of
Parasitology**

On 13th January, the School offered to found a Chair of Parasitology, for five years to commence with, at the University of Liverpool, in memory of the late Dr. Walter Myers. The offer was accepted by the University on 30th January.

**Alfred Jones
Chair of
Tropical
Medicine**

**Resignation of
Chairman**

On 10th February, a letter was received from the University, stating that Dr. J. W. W. Stephens had been appointed to the Alfred Jones Chair of Tropical Medicine.

On April 21st, a letter was received from Sir William H. Lever, Bart., stating that he was obliged to resign his office of Chairman of the School, owing to the many calls on his time and his frequent absences abroad. It was resolved that :—

‘The Incorporated Liverpool School of Tropical Medicine have received with the greatest regret the notification from their Chairman, Sir W. H. Lever, Bart., that it is his desire to be relieved from the office of Chairman, owing to the many calls upon his time, and in accepting his resignation they wish to place on record their great appreciation of the capable manner in which Sir William, during his period of office, has conducted the affairs of the School ; of his generous financial assistance readily given on all occasions, and of the unfailing courtesy he has always shown to his colleagues in the School.’

It was further resolved that :—

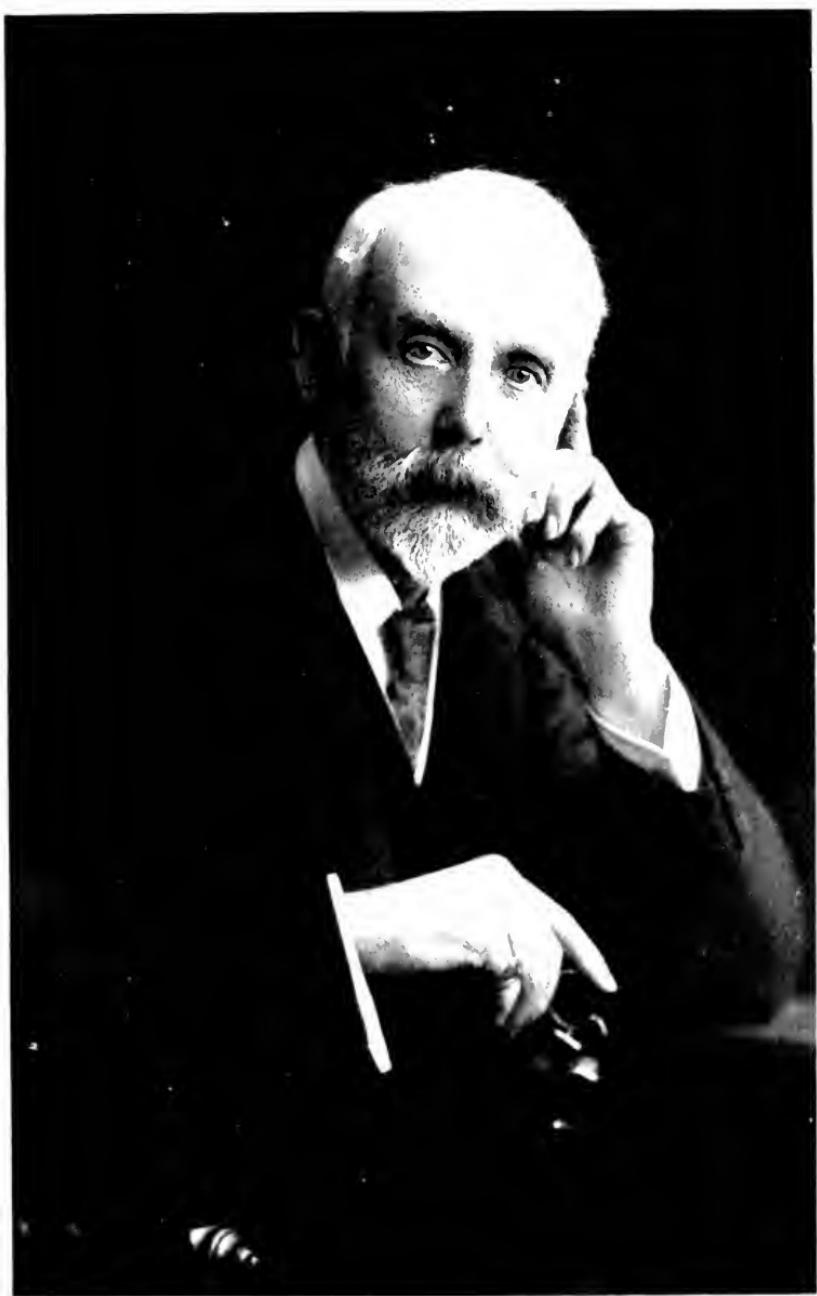
‘Sir William Lever be asked to accept the position of Honorary Vice-President of the School.’

**Mr. Danson
appointed
Chairman and
Dr. Caton
Vice-Chairman**

**Honorary
Vice-Presidents**

On May 5th, Mr. F. C. Danson, who had been a member of the Committee since 1901 and Vice-Chairman for the last six years, was unanimously elected Chairman of the School, and Dr. Caton, who had represented the Council of the University on the Committee since 1902, was appointed Vice-Chairman.

In addition to Sir William Lever, Bart., who has already been mentioned, Sir Edward Durning-Lawrence, Bart., accepted the invitation to become Honorary Vice-President of the School.



SIR FRANCIS C. DANSON

Tutor, p. 48.

Sleeping
Sickness
Committee

In June, Professor Newstead was appointed a member of the Inter-Departmental Committee on Sleeping Sickness appointed by the Secretary of State for the Colonies.

1913

At the request of the Colonial Office, the School undertook to send a tropical exhibit* to the International Exhibition at Ghent, in 1913. This comprised four cases, illustrating Malaria, Sleeping Sickness, Yellow Fever, and Ankylostomiasis. The diseases were illustrated by the exhibits in the cases, and by means of a unique series of large photographs placed on screens. The Tropical Section of the English Pavilion was largely visited by the public, and in a letter, dated February 4th, 1914, the Board of Trade expressed their appreciation of the great value of the exhibit and a Diploma was awarded to the School.

Ghent
Exhibition

31st Expedition The 31st Expedition of the School, consisting of Dr. H. B. Fantham, was dispatched to Khartoum, in July, to study diseases prevalent there.

On July 2nd, Dr. Harald Seidelin sailed for West Africa, by request of the Colonial Office, to assist in the investigation of yellow fever and other non-malarial fevers.

Yellow Fever
Commission

On September 8th, Dr. David Thomson resigned his appointment in the School in order to take up a Grocers' Scholarship.

On 24th September, it was agreed that Dr. Prout be appointed Lecturer on Tropical Sanitation to the School, at a salary of £100 per annum, commencing on January 1st, 1914.

Dr. Prout
appointed
Lecturer In
Tropical
Sanitation

On 10th December, Dr. Warrington Yorke was appointed to the newly endowed Chair of Parasitology.

Dr. Yorke
appointed to
Walter Myers
Chair of
Parasitology.
Award of Mary
Kingsley
Medal

During the year, the Mary Kingsley Medal was awarded to Professor Fred. V. Theobald, in recognition of his researches in Entomology.

* Prepared by Professors Newstead and Stephens.

1914

On 9th January, it was agreed to send an assistant to Dr. Wolferstan Thomas, and Dr. Morrison was accordingly dispatched to Manáos, but returned to this country within a few months.

**Further Bequest
from
Sir Alfred Jones
Estate.**

On 9th February, it was reported that Mr. O. Harrison Williams, executor of the late Sir Alfred Jones, would, under the provisions of the interim charitable scheme, and the approval of the court, pay to the School another sum of £40,000.

Sir Edward Merewether, K.C.V.O., Governor of Sierra Leone, was elected Honorary Vice-President.

**Dr. Blacklock
appointed
Director of
Runcorn
Laboratory.**

**Grant from the
Board of
Education.**

On March 6th, Dr. B. Blacklock was appointed Director of the Runcorn Research Laboratory in succession to Dr. Yorke.

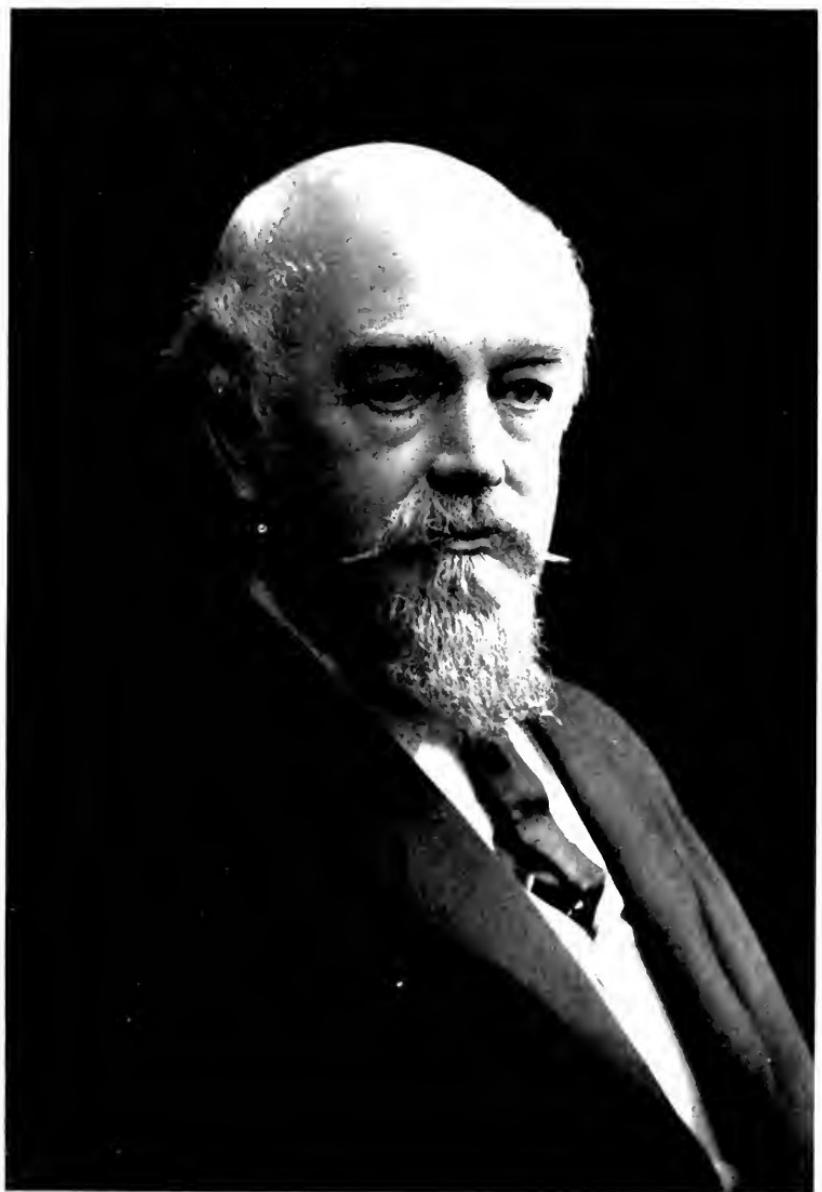
In April, a grant of £150 which was allocated for teaching purposes, was received from the Board of Education.

On April 27th, it was announced that the special funds collected for the Yellow Fever Bureau would be exhausted at the end of the year, and consequently, the Professional Sub-Committee was requested to report on the future organisation of the Bureau.

On June 15th, it was resolved that :—

‘The Committee, having been informed that the special fund for the maintenance of the Yellow Fever Bureau will be exhausted at the end of December next, recommend that :—

- (1) From that date the Yellow Fever Bureau and Bulletin, and the posts associated with their work, be discontinued.
- (2) Work in the subject of Yellow Fever be organised and carried on by research or expeditions, under the control of the School, if special funds can be raised for the purpose.
- (3) The necessary publications dealing with Yellow Fever should be included in the “Annals” of the School, or as a supplement thereto.’



RICHARD CATON, C.B.E.

On 27th April, a resolution of condolence was sent to the relatives of the late Sir Edwin Durning-Lawrence, a benefactor of the School.

1914

**Death of
Sir E. Durning-
Lawrence.**

In May, Professor Ross and Professor Stephens represented the School at the official opening of the new Institut für Schiffs und Tropenkrankheiten in Hamburg,

On the death of the Rt. Hon. Joseph Chamberlain the following resolution was passed at a meeting held on July 13th :—

**Death of
Rt. Hon. Joseph
Chamberlain.**

'The Committee of the Liverpool School of Tropical Medicine beg to tender their deepest sympathy to Mrs. Chamberlain and the other members of the family, in their recent great bereavement, and desire to place on record their deep appreciation of the work of the late Mr. Chamberlain, and gratefully to acknowledge the important services which he rendered with such far-reaching and beneficial results in the improvement of the health conditions in the Tropics. They further feel that by his death, the Liverpool School of Tropical Medicine has lost one, who with the late Sir Alfred Jones, did so much to promote the work in which it is engaged.'

The Sir Alfred Lewis Jones Tropical Ward of the Incorporated Liverpool School of Tropical Medicine, erected at the Royal Infirmary, was opened on 23rd July by the Countess of Derby, in the presence of many influential citizens. The provision of the new building saw the fulfilment of one of the objects which the late Sir Alfred Jones, as founder of the Liverpool School, had in view, in order that medical science in the treatment of the dreaded diseases of the Tropics should be advanced.

**Opening of
Tropical Ward,
Royal
Infirmary.**

The new ward, with its adjoining laboratory for students, is a one-storied building, the entrance to which is from the corridor leading to the main staircase. The ward is 15 feet high, 25 feet wide, and 42 feet long, affording cubic contents of 1,575 feet to each of the ten beds. The laboratory, 40 feet by 20 feet, is placed on the north side, thus giving a suitable light for microscopical work, and provides accommodation for about 50 students. There is

1914

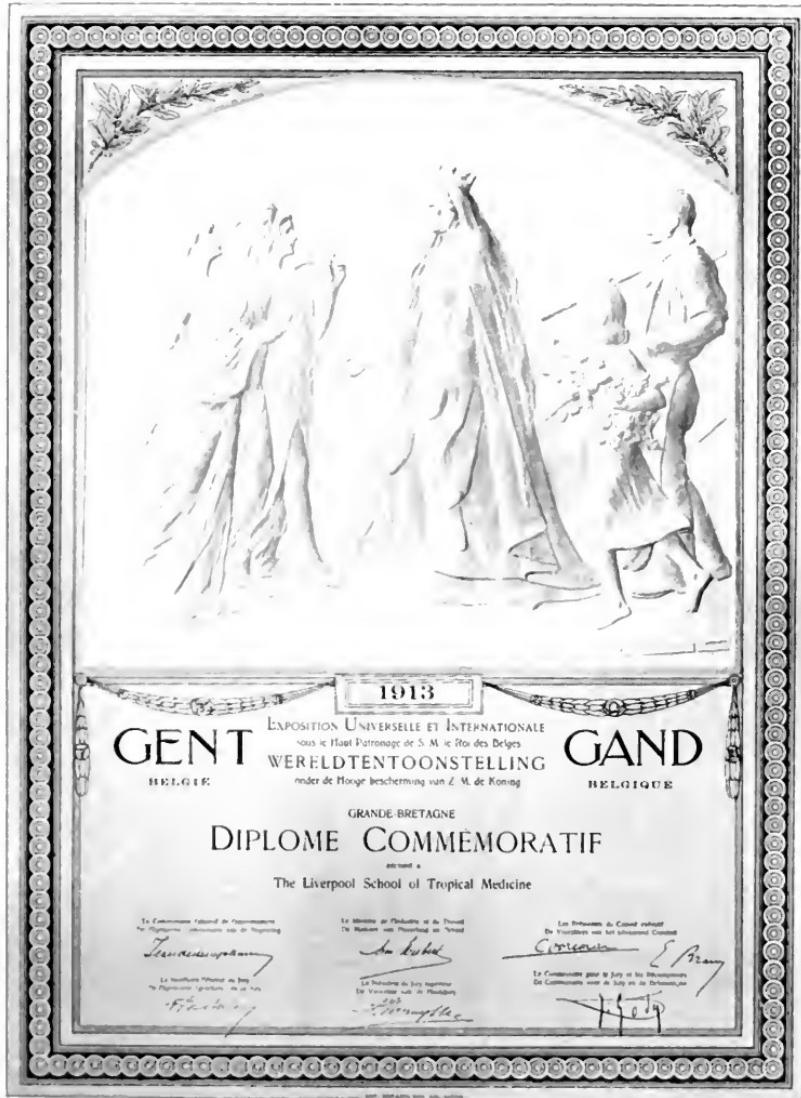
a small serving-room between it and the ward. All the internal walls are faced with glazed bricks of quiet colour, with covered angles at floor and ceiling, and the ward is floored in oak blocks, the other paving being in terazzo, in keeping with the rest of the hospital. The outer walls are of rustic brick, with terra cotta dressings, in harmony with the main building. The heating is by low-pressure steam, with fresh-air inlets and hopper-topped windows for ventilation. There is electric lighting throughout.

Mr. F. C. Danson (Chairman of the School), presided at the opening ceremony, and amongst others present were The Right Honourable The Earl of Derby, K.G., G.C.V.O., the Lord Mayor and Lady Mayoress of Liverpool, Sir Thomas Barlow, Bart., K.C.V.O., Sir Ronald Ross, K.C.B., Sir William Lever, Bart., Sir W. B. Bowring, Bart., Sir Charles Petrie, Sir W. Scott Barrett, Sir Alfred Dale (Vice-Chancellor of the University), Messrs. H. Wade Deacon and Holford Harrison (Chairman and Treasurer of the Royal Infirmary), Professor Caton (Vice-Chairman of the School), Mr. O. Harrison Williams (Vice-President of the School), and all the members of the staff of the School.

The Chairman said the new ward represented an important development in the work of the Tropical School, and it also involved some little change in their work. When the School was first started, fifteen or sixteen years ago, it at once became apparent that they could not do really satisfactory work without giving their teachers and students an opportunity of studying tropical diseases at the bedside.

That difficulty was overcome by the generous and spontaneous assistance of their good friends at the Royal Southern Hospital, who placed a ward aside for the treatment of tropical diseases, and gave the students every possible assistance in the study of them. He was very pleased to take that opportunity of acknowledging the indebtedness of the School to the Southern Hospital for the assistance they then rendered, and had continued to render up to the present time.

The work of the School, however, expanded so rapidly that, several years ago, it would be within the recollection of the Meeting, the then Chairman of the School (the late Sir Alfred Jones)



To J. D. C. p. 52.

1914

approached the President of the Southern Hospital (the late Mr. William Adamson) with a view to seeing whether the Hospital could provide special accommodation for the teaching work, which was then carried on in the Laboratories of the University. The authorities of the Southern Hospital received the suggestion with approval, and the only site in connection with the Hospital, which it was within their power to grant, was inspected. It was, however, found to be quite inadequate, and the matter, for the time being, fell through. The clinical work of the School continued to be carried on at the special ward provided by the Southern Hospital, and the teaching and research work, as before, at the University.

As time went on, however, it became imperative to increase the teaching and research accommodation. This need was now to be met by the erection, in Pembroke Place, of the new buildings of the School, in memory of its founder, Sir Alfred Jones. In view of the close proximity of the Infirmary, it became obvious that the Tropical Ward of the School would have to be located in that Hospital, and the Executor of the estate of Sir Alfred Jones provided the necessary funds for building such a ward.

They opened negotiations with the Royal Infirmary, and that ward was the result. He trusted that the new ward, which in its equipment embodied the best modern ideas, would thoroughly fulfil all those objects which they had in view. As a teaching institution it would be of the utmost value, and he trusted it might also prove a source of relief to those suffering ones who might come there as patients. He wished it every possible success, and trusted it would be a source of strength also to the Infirmary. His only regret was that this step unavoidably severed, to some extent, their connection with their good friends at the Southern Hospital, but they would be for ever grateful for the invaluable assistance rendered to them by that Institution during their early struggles.

The Countess of Derby said she had great pleasure in declaring the ward open, and wished it every success.

Mr. Danson in formally requesting the Chairman of the Royal Infirmary to accept the new building from the Committee of the School, asked that it be administered according to the agreement between the two bodies.

Mr. H. Wade Deacon said he had great pleasure on behalf of the Infirmary in accepting the new ward. He believed it would bring renown to the Royal Infirmary, success to the men studying there, and relief to the patients who might come to it.

1914

Sir Thomas Barlow proposed a vote of thanks to the Countess of Derby. He said in years to come the Countess would be glad and proud to have taken that important part in a new step towards advancing the prosperity of that School, the Hospital, and the University.

The vote of thanks was heartily carried.

The Earl of Derby, replying on behalf of the Countess, remarked that Liverpool and its Tropical School had set an example to the whole world, and he was very glad to know that they were in every way prepared to be up to date, as was shown by the new ward. He had no doubt that science would be greatly advanced, thanks to the Founder of the School, who had given that ward to the Royal Infirmary.

The Lord Mayor believed that the commercial men of Liverpool would feel intense satisfaction that the work of the School would be carried on under, perhaps, even better conditions than in the past.

Sir Thomas Barlow, Bart., K.C.V.O., and other guests were subsequently entertained to luncheon, by the Chairman of the School, at the Adelphi Hotel.

DECLARATION OF WAR AGAINST GERMANY,
AUGUST 4th.

**Professor
Stephens
appointed
Hon. Physician
to the Ward.**

Professor J. W. W. Stephens was appointed Hon. Physician to the Tropical Ward in October, and, on 9th November, Dr. Prout was appointed Assistant to the Physician.

In October, Mr. W. Drawz, the librarian, was advised that it was not permissible to retain his services in any capacity at the School, as he was an enemy alien, and it was resolved that his connection with the School must cease immediately.



THE SIR ALFRED LEWIS JONES TROPICAL WARD, ROYAL INFIRMARY

**Runcorn
Laboratory
closed**

On November 9th, Professor Yorke reported that in view of the fact that Dr. Blacklock and he were shortly proceeding to Sierra Leone, and of the impossibility of obtaining the services of anyone to take charge owing to the present emergency, the Runcorn Research Laboratory had been closed and arrangements made with Messrs. Evans and Webb to take over the School's liability with respect to the premises.

1914

This laboratory, which has been already mentioned, was established in September, 1904, and played no small part in the success achieved by the School in the fields of scientific research during its ten years existence. It was established to enable experimental work on trypanosomiasis to be carried on and it was this subject which mainly occupied the energies of the staff throughout its existence. In view of the fact that many important reports on sleeping sickness and the trypanosomiases of domestic animals have emanated from the Runcorn Research Laboratory, the name at least is familiar to most of those interested in tropical medicine, and it is therefore appropriate to give here a brief description of the laboratory as it really was.

The building consisted of two small-roomed cottages which were made to communicate by cutting a doorway through the dividing wall.

The two lower rooms of one of the cottages were used by Dr. Nierenstein as a chemical laboratory. The front lower room of the other cottage was used as an incubator room, and the back lower room, together with a shed, constructed by roofing the yard, served as the animal houses. The upper front rooms served as the general laboratory. An upper room of a third cottage was ultimately taken in by knocking a hole through the wall

1914

and building up the legitimate doorway. This was the artist's room where Miss Brookfield worked from 1906-1914. As these cottages only communicated on the upper floor, communication between the lower rooms could be effected only via the street or by the more circuitous route up and down two flights of rickety stairs.

The animal house was heated by a coke stove and the laboratory by small coal fires. The place was lighted by gas, and the power for the centrifuge was obtained from a gas engine. It was not until 1913 that electric current was introduced and a telephone installed. Such were the 'new and more favourable conditions' duly noted in the Annual Report of the School for 1906.

Although the accommodation was crude and in many respects inadequate, yet the equipment of scientific apparatus was very complete, and enabled those working at the laboratory to take full advantage of the splendid material at their disposal.

32nd Expedition The 32nd Expedition of the School, consisting of Professor Yorke and Dr. Blacklock and a laboratory assistant, was dispatched to Sierra Leone to study sleeping sickness in the Colony and at the same time to report on a suitable site for the proposed laboratory of the School.

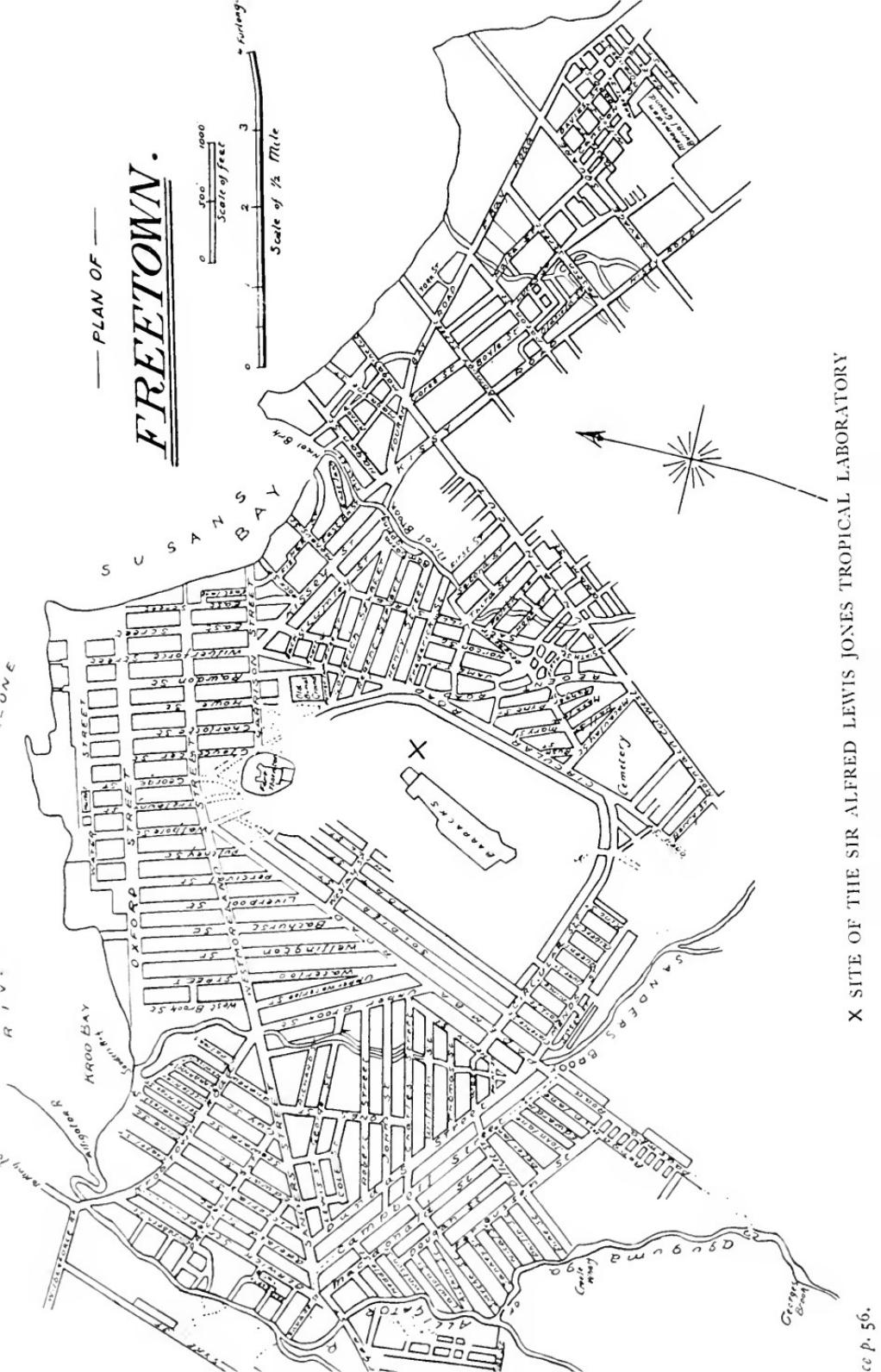
**Proposed
Laboratory of
the School at
Sierra Leone**

With a view to carrying on research work in various branches of Tropical Medicine, the School desired to establish a permanent Laboratory on the West Coast of Africa. The Executor of the estate of the late Sir Alfred Jones had allocated a sum of money for the erection of such a Laboratory, and the Colony of Sierra Leone had been selected. This colony possesses special advantages for such work, as there is ample material for the study of

— PLAN OF —

FREETOWN.

A scale bar with two horizontal lines. The top line is labeled "Scale of 1000 feet" and has tick marks at 0, 500, and 1000. The bottom line is labeled "Scale of 1/2 Mile" and has tick marks at 0, 1, 2, and 3.



X SITE OF THE SIR ALFRED LEWIS JONES TROPICAL LABORATORY

Tropical Diseases, and, being one of the nearest Tropical African Colonies to England, is accessible more rapidly and cheaply than any other suitable place in the Tropics.

1914

It was proposed that the Laboratory should be under the immediate direction of an expert in Tropical Diseases, a member of the Staff of the School, who would divide his time between research work on the Coast, and teaching and research work at Liverpool. Arrangements would also be made for other members of the Staff of the School to undertake research work at the Laboratory.

The activities of the School during this and succeeding years were mainly devoted to War work. The following members of the staff were on active service overseas during 1915 :—

War Work.

Lieut.-Col. Sir Ronald Ross, K.C.B., at Alexandria.

Professor Robert Newstead, F.R.S., Insect Prophylaxis in France and Flanders.

Lieut.-Col. W. T. Prout, C.M.G., at Cairo.

Captain Warrington Yorke, at Malta.

Lieut. B. Blacklock, at the Dardanelles.

New Laboratory On March 10th, the following letter was placed at the disposal of the War Office sent by the Chairman to the military authorities :—

1915

' Colonel Coates,
 ' " Ingleside,"
 ' Whalley Range, Manchester,

10th March, 1915.

' Dear Sir,

' When the War started, the Liverpool School of Tropical Medicine offered their New Ward in the Royal Infirmary of Liverpool for the treatment of emergency cases of wounded soldiers, which offer was no doubt transmitted to the War Office by the Authorities of the Royal Infirmary at the time.

' I now learn that additional accommodation for wounded soldiers in Liverpool is required, and, as Chairman of the School of Tropical Medicine, I have much pleasure in placing at the disposal of the War Office the new premises of the School, now

1915 rapidly approaching completion. The Committee of the School, before whom I placed this proposal, unanimously agreed to the suggestion.

'I have given instructions for the architect to prepare plans of the accommodation in the new buildings, which I hope to be able to forward to you to-morrow.

'The School will be glad to do what they can, if this offer is accepted, to accelerate the completion of the buildings, including heating and lighting.

'I am only in a position to offer the buildings, not the necessary equipment for patients. The proximity of the Royal Infirmary to the new buildings will no doubt be of much advantage.

'I am, etc.,

'(Signed) F. C. DANSON,

'Chairman.'

The following reply was received :—

' "Ingleside,"'

'Whalley Range, Manchester,

'22nd March, 1915.

'From Colonel William Coates,

'A.D.M.S., Western Command,

'To the Chairman,

'Liverpool School of Tropical Medicine,

'Liverpool.

'Sir,

'I am directed by the Army Council to inform you that it has been decided to accept your splendid offer of the Liverpool School of Tropical Medicine for the purpose of a military hospital, and to thank you again for your most generous offer.

'I propose to place the details concerning the necessary alterations to this building for hospital purposes in the hands of the Officer-in-Charge of the 1st Western General Hospital, under my direction. I have, therefore, ordered him to place himself in communication with you, so that any structural alterations that may be required may be undertaken by the Contractor for the Building, the cost to be borne by the War Office.

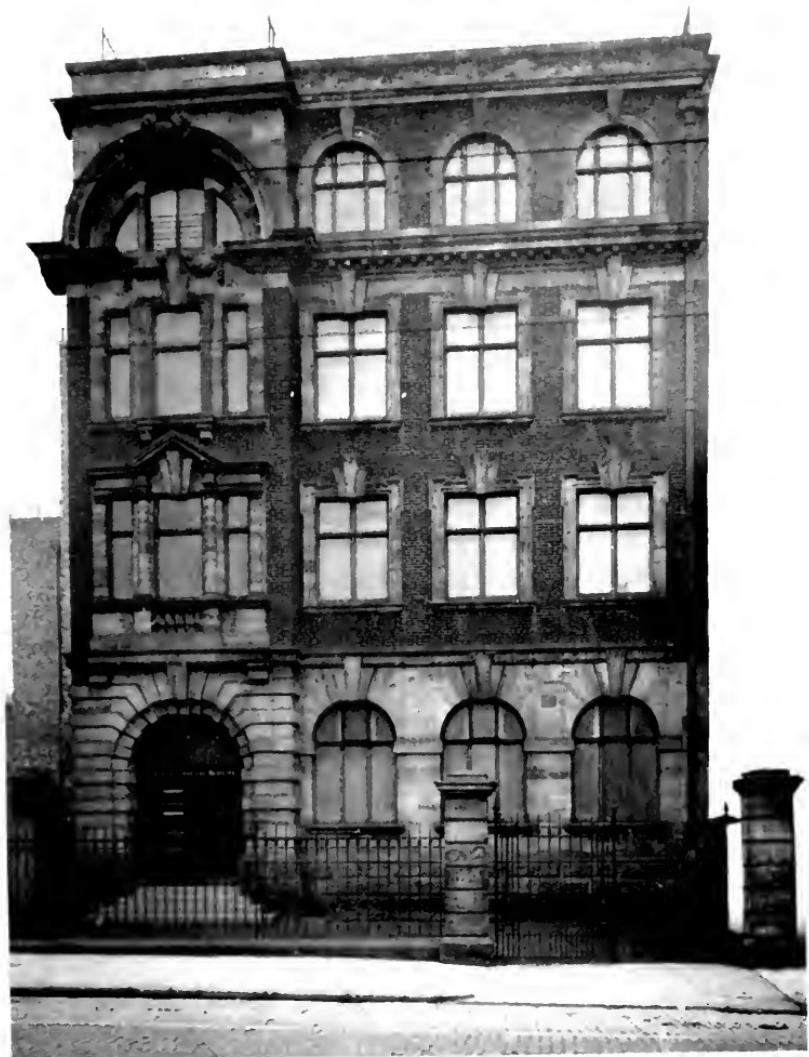
'I have every reason to hope that this great kindness on your part and that of your Committee will prove of the greatest service in this great national emergency.

'I am, etc.,

'(Signed) WILLIAM COATES,

'Colonel,

'A.D.M.S., Western Command,
For D.D.M.S., Western Command'



FRONTAGE OF THIRD LABORATORY OF SCHOOL

To face p. 58.

Tropical School Auxiliary Military Hospital The Tropical School Auxiliary Military Hospital, consisting of about 200 beds, 1915

was accordingly opened in September, and was devoted solely to the treatment of patients suffering from tropical diseases, mainly malaria and dysentery. The Hospital was put in the charge of Professor Stephens, with the assistance of Capt. Llewellyn Morgan, R.A.M.C.

The Sir Alfred Lewis Jones Tropical Laboratory Professor Yorke and Dr. Blacklock, who returned from Sierra Leone in April, recommended that the School should communicate with the Colonial Office, concerning the site on Tower Hill, Freetown, which they had inspected and which they considered most suitable for the proposed laboratory. This site was in the possession of the War Office, but the General Officer Commanding had informed them that he would recommend the Army Council to lease the site to the School. On September 13th, a letter was received from the Colonial Office, stating that the Army Council was prepared to surrender this site to the Colonial Government, and that it was presumed that the Colonial Government would be willing to allot the land to the School for the purpose of erecting a laboratory thereon.

As further funds for the Yellow Fever Bureau were not forthcoming, and the money collected had now been expended, it was resolved on 10th May to terminate the Bureau.

Yellow Fever Bureau terminates

On April 5th, Miss Doris L. Mackinnon, seconded by the War Office, Mr. J. R. Matthews, Lecturer on Botany in the Birkbeck College, and Mr. A. Malins Smith, Lecturer on Botany in Glasgow, the two latter recommended by the Royal Society, were appointed to assist in dysentery research. Mr. H. F. Carter, Lecturer in Entomology, was

1916

Appointments of Special Assistants for Dysentery Research

1916 also engaged in this work, through the courtesy of the Professor of Entomology.

In June, Dr. H. B. Fantham, who held the posts of Lecturer in Parasitology and Editorial Secretary to the *Annals of Tropical Medicine*, resigned his position to take up an appointment to a Chair in University College, Johannesburg, South Africa. Mrs. Fantham, who had been employed by the School for a few months to assist in dysentery research, left at the same time.

Appointment of Librarian

In September, Miss Dorothy Allmand was appointed to the Librarianship, vacated by Mr. W. Drawz in 1914.

In September, Professor Yorke and Dr. Blacklock, who had held temporary commissions in the R.A.M.C., returned to their duties at the School.

**Royal Society
Grain Pests
(War)
Committee**

The Royal Society, representing a Government Department, appointed a Committee to deal with the damage caused to grain by insects and acari, during transit and in store. One of the two centres of investigation was established in Liverpool University, under the direction of the Professor of Entomology.

1917

Research on Malaria In January, a request was received from Sir Alfred Keogh, D.G.M.S., through Sir David Bruce, that the School should undertake special research into the treatment of malaria.

**Appointment
of Special
Assistants for
Malaria
Research**

On January 8th, Mr. C. Forster Cooper, Curator of the Zoological Museum, Cambridge, was engaged to take part in malaria research.

In February, Sir Ronald Ross and Professor Stephens were appointed Consultants on Malaria by the War Office, with the rank of Lt.-Col., R.A.M.C. Professor Stephens was in charge of the Western, Northern, and Scottish Commands, and Sir Ronald Ross of the Southern and Eastern Commands.



ENTRANCE HALL

In March, the services of Dr. J. W. S. Macfie, who had been working in a voluntary capacity in the School since November, 1916, were placed at the disposal of the School by the Colonial Office for special work connected with the investigation of malaria.

1917

In March also, owing to the large influx of malaria cases into this country, it was found that the accommodation at the Tropical School Hospital was insufficient, and special malaria wards containing about 300 beds, were set aside at Belmont Road Auxiliary Military Hospital; Dr. Blacklock was appointed Physician-in-Charge.

**Belmont Road
Auxiliary
Military
Hospital**

In May, Miss Mackinnon left the School to continue dysentery research under the War Office at Southampton.

During the summer, three courses of practical instruction in tropical parasitology, each lasting a fortnight, were given gratuitously by the staff of the School to about seventy officers of the R.A.M.C., stationed at Blackpool.

**Instruction of
R.A.M.C.
Officers**

In September, Miss Brown was appointed an Assistant to the Professor of Entomology.

Miss M. Brown

On 8th October, Mr. A. H. Milne, C.M.G., who had been Secretary to the School almost from its inception, resigned his position owing to ill-health. The Chairman sent Mr. Milne a letter, expressing deep appreciation of the services he had always rendered to the School.

**Resignation of
Secretary**

On October 22nd, it was resolved that :—

**Retirement of
Sir Ronald Ross**

'The term of five years for which Sir Ronald Ross, K.C.B., F.R.S., was appointed to the Chair of Tropical Sanitation in the University of Liverpool having expired, the Committee of the Liverpool School of Tropical Medicine desire to place on record their high appreciation of the great and valuable services by Sir Ronald Ross to the School since its formation to the present time, and further, to express their very sincere regret at the severance of their old friend and colleague from the School as a member of the staff.'

On 22nd December, Professor Stephens was appointed

1917

a member of the Tropical Diseases Advisory Committee by the Secretary of State for the Colonies.

**Mary Kingsley
Medal**

During the year the Mary Kingsley Medal was awarded to Dr. Griffith Evans, late Inspector and Veterinary Surgeon, Government of India, in recognition of his researches into surra and other tropical veterinary diseases.

**Mr. H. Wade
Deacon**

During this year Mr. Wade Deacon was elected a member of the Committee as a representative of the Council of the University.

1918

**Death of
Mr. Milne**

On 21st January, Mr. A. H. Milne, who had resigned the Secretaryship of the School in 1917, owing to ill-health, died at Paignton from an attack of pneumonia. He was closely associated for many years with the late Sir Alfred Jones in all his work connected with the School, and contributed, in no small degree, to the development of its efficiency.

**Appointment of
Assistant
Lecturer on
Entomology**

On 4th April, Miss Alwen M. Evans was appointed Assistant Lecturer in Entomology.

In July, Dr. Blacklock having proceeded overseas, the malaria wards at Belmont Road Auxiliary Military Hospital were transferred to the charge of Dr. J. W. S. Macfie.

**Resignation of
Miss Duvall**

Miss H. M. Duvall, who had been taking part in the Royal Society Grain Pests Research, resigned her position, which was subsequently offered to and accepted by Mr. H. M. Morris.

**1919
Dr. Adami**

On his appointment to the post of Vice-Chancellor of the University, Dr. Adami became *ex officio* a member of the Committee, representing the University.

In March, Mr. J. R. Matthews, who had been engaged for three years on dysentery research, tendered his resignation in order to resume his duties at the Birkbeck College.

Mr. Carter also gave up dysentery research, and returned to his work in the department of Entomology.

LIBRARY



On 31st March, Miss Nora Murphy, who had acted for many years as Secretary in the School Laboratories, resigned her post. The Committee put on record their great appreciation of Miss Murphy's excellent and devoted service since joining the School in 1902.

1918

**Resignation of
Miss Murphy**

Miss M. Whittle was appointed to the post vacated by Miss Murphy.

**Appointment of
Miss M. Whittle**

In April, Dr. Blacklock returned from overseas and was appointed Lecturer in Parasitology to the School, the appointment to date from 1914.

**Appointment of
Dr. Blacklock**

In September, Mr. A. Malins Smith resigned his post as research worker in dysentery, in order to take up an appointment as Lecturer in Biology at Bradford Technical College.

During the year awards were made to Dr. J. W. S. Macfie, of the West African Medical Service, for his devotion and distinguished contributions to Science, and to the Oswaldo Cruz Institute in recognition of the scientific work of the founder, the late Dr. Oswaldo Cruz.

**Mary Kingsley
Medallists**

**Manáos
Research
Laboratory**

On the arrival of the 15th (Yellow Fever) Expedition at Manáos, in 1905, it was found necessary, for the work of the Expedition, to establish a laboratory of a more or less permanent character. This laboratory remained in being until January, 1909, when, owing to the return of Dr. Thomas to Liverpool, it was closed. In June, 1910, Dr. Thomas returned to Manáos and opened the present laboratory: in addition, a small private hospital was opened for the use of the foreign firms. As no bacteriologist was attached to the Santa Casa Hospital, all pathological work for it was undertaken by the laboratory, as was also the pathological work of the several state and municipal authorities. This work was done gratuitously. In 1914, it was decided to extend the

1919

1919 operations of the laboratory, and for this purpose to obtain the services of additional medical men ; the outbreak of war, however, caused all developments to be deferred until 1919, when Dr. Thomas visited Liverpool and presented a memorandum setting forth the direction in which developments should proceed, and asking for the appointment of three medical men, and a well-trained laboratory assistant. Through the generosity of the Booth Steamship Company, funds were placed at the disposal of the School for this purpose, and accordingly, Drs. Burnie, Gordon, and Young were appointed research assistants at the Manáos Laboratory.

**Appointment of
Drs. Burnie,
Gordon and
Young**

Dr. Thomas returned to Manáos in 1919, and Dr. Burnie left in January the following year.

Towards the end of this year Mr. R. Rankin was appointed Treasurer.

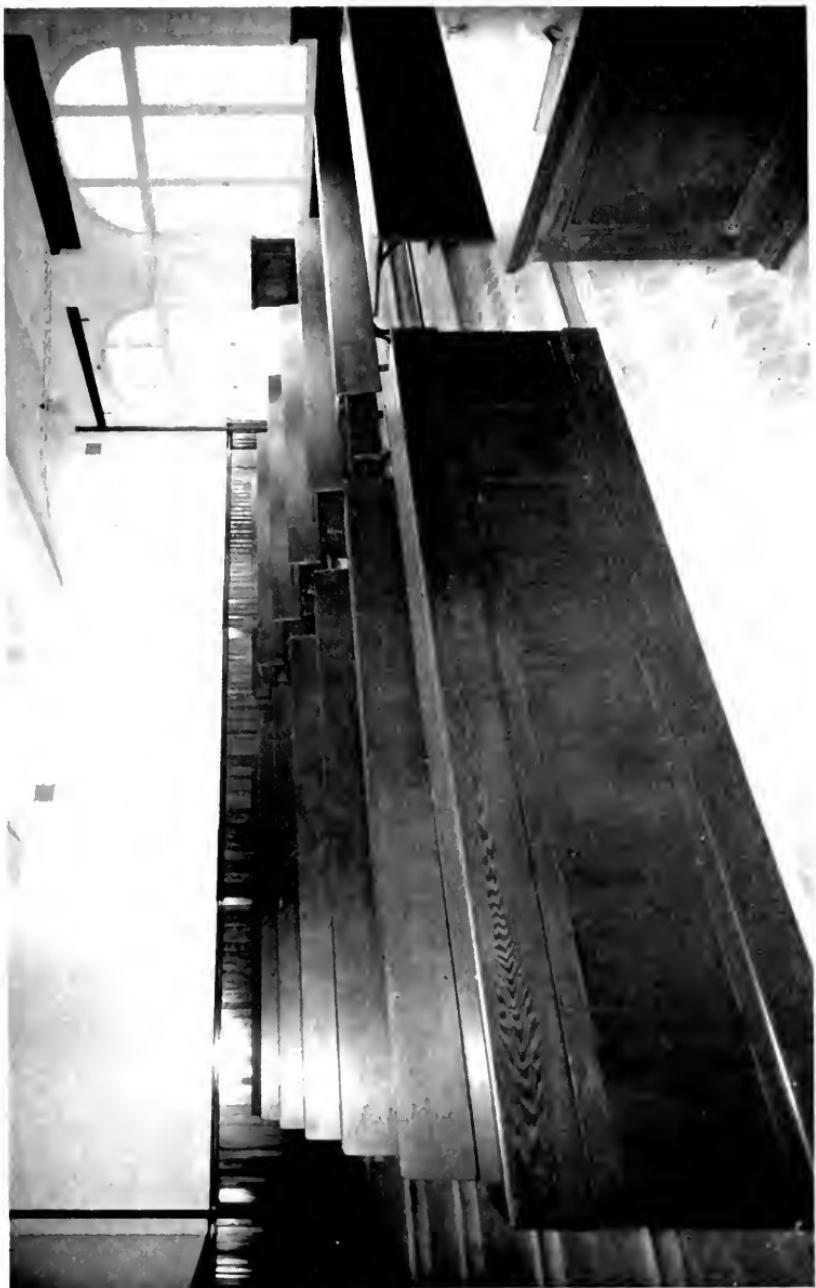
1920 Dr. Young left for Manáos in June, and arrangements were made for Dr. Gordon to sail in October, 1920.

**Gift of
Dr. and Mrs.
Hamilton Rice**

In April, 1920, Dr. and Mrs. Hamilton Rice made the magnificent gift to Dr. Thomas of a launch, 45 feet long by 14 feet broad drawing 20 inches, fitted with kerosene engines of 32 horse power, capable of steaming 7 knots, electrically lighted, and mosquito-proofed, to serve as a floating laboratory. The donors have also generously undertaken to contribute £2,000 per annum, and to raise an additional sum of £3,000 per annum towards the cost of maintenance.

**Sierra Leone
Research
Laboratory** Arrangements were completed for a lease by the War Office to the School of the site on Tower Hill, Freetown. The site is 1½ acres and is leased at a nominal rent of 2/6 annually, for a period of 20 years with option of renewal. The plans have been approved ; the building will provide accommodation for two resident workers, and consist of two floors.

LECTURE THEATRE



1920

The ground floor is the laboratory, the upper floor contains two bedrooms, a dining room and a kiosk, projecting from the front verandah over which there is an attic. The laboratory faces North, and is situated at an elevation of about 180 feet.

New Laboratory of the School The War Office having vacated the New Laboratory in June, 1919, the building was renovated and re-decorated; the furniture was supplied by Messrs. Heywood & Sons, Manchester. In 1920, the January to April course of instruction was given in the New Building.

The following is a brief summary of the main features of the new quarters of the School. They are situated close to the University and Royal Infirmary. The dimensions of the building are 162 feet in maximum length by 84 feet in width. In addition to the basement, in which are accommodated the Photographic Department and large storage rooms, there are four floors. The ground floor has :—

- (1) Lecture Theatre, with accommodation for about seventy students.
- (2) Library, 33 feet by 27 feet, furnished in oak, and with parquet floor.
- (3) Museum, a spacious room 80 feet by 69 feet, with preparation room adjoining.

The first floor has twelve rooms, in which are housed the departments of Tropical Medicine and Entomology.

The second floor has the main Class Laboratory, 69 feet by 58 feet, excellently lighted, and three other rooms devoted to the department of Parasitology.

The third floor has a large research laboratory, 37 feet by 30 feet, and two research rooms.

On the roof is an Insectarium, a mosquito-proofed house, and other accommodation.

1920

It will thus be seen that the building is of an ample character, and will admit of an increase, in the future, of the staff of research workers.

We here terminate this enumeration of the events of the first twenty-two years of the School's life. We have said little of the motives that impelled all those, whose names we have recorded, to work in establishing and maintaining the School during this period, but amidst the difficulties they encountered, a persistent hope of success has constantly inspired them.

Our record shows that the objects of the far-seeing founders of the Liverpool School of Tropical Medicine are being achieved by the process of development, which the School is constantly undergoing. A reference to Appendix III, in which we have given a list, so far as possible complete, of all the works published by members of the staff from the date of its foundation to the present day, will give some idea of the scientific achievements of the School.

The record also shows that the School is now preparing itself for further effort in attacking the many problems in the sphere of tropical medicine which still await solution.

In the advance of knowledge of tropical diseases, it has a two-fold function: instruction and research. Without the latter, the former is of no avail. The School has carried on this double function for these twenty-two years, and in so doing has performed a national duty and met in return with national support. Its future progress is dependent upon the active sympathy of this City and of the Nation, and more especially of those whom Destiny binds in diverse ways to tropical lands.

J. W. W. S.

W. Y.

B. B.

MUSEUM





MAIN LABORATORY

ENTOMOLOGICAL DEPARTMENT



To face p. 66.

APPENDIX I

**'WHO'S WHO' IN THE
LIVERPOOL SCHOOL OF TROPICAL MEDICINE**

- ADAM (E.)**. Represented Liverpool Chamber of Commerce on Committee, 1899-1904.
- ADAMI (John George)**, C.B.E., M.A., M.D., F.R.S. Vice-Chancellor of Liverpool University, 1919-. Member of Committee, 1919-
- ADAMSON (William)**. President of Royal Southern Hospital. Vice-Chairman of Committee, 1898-1908.
- ALEXANDER (William)**, M.D., F.R.C.S. Surgeon, Royal Southern Hospital. Represented Royal Southern Hospital on Committee, 1898-1910.
- ALLMAND (Dorothy)**. Librarian, 1916-
- ALSOP (James Willcox)**, O.B.E., J.P. Member of Committee, 1910-
- ANNETT (Henry Edward)**, M.D., D.P.H. Demonstrator in Tropical Pathology, 1899-1902. Member of 1st Expedition, to West Africa, 1899. Member of 3rd Expedition, to Nigeria, 1900. Honorary Lecturer, 1905-1911.
- AUSTEN (Ernest Edward) Major, D.S.O.** Member of 1st Expedition, to West Africa, 1899.
- BARRATT (John Oglethorpe Wakelin)**, M.D., D.Sc. Member of 19th Expedition, to Nyasaland, 1907. Honorary Lecturer, 1910-1913.
- BEATTIE (James Martin)**, M.A., M.D. Professor of Bacteriology, University of Liverpool. Represented Senate of University on Committee, 1913-
- BLACKLOCK (Breadalbane)**, M.D., D.P.H. Research Assistant, Runcorn Research Laboratory, 1911-1914. Director of Runcorn Laboratory, 1914. Member of 32nd Expedition, to Sierra Leone, 1914. Lecturer on Parasitology, 1914- Lt., R.A.M.C., 1915. M.O. i/c malaria wards, Belmont Rd. Aux. Military Hospital, 1916-1918. Member of Committee, 1917. Capt., R.A.M.C., 1918-1919. Research on malaria, 1916-1919 [war work].
- BLOOD (Joseph Fitzgerald)**, M.D., Major, I.M.S. ret. Honorary Lecturer, 1908.
- BOOTH (Charles), Jun.** Represented Steamship Owners' Association on Committee, 1899-1901. Member of Committee, 1901-
- BOWRING (Sir William B.) Bart.** Represented Council of University on Committee, 1903-1916.
- BOYCE (Sir Robert William)**, M.B., F.R.S. Professor of Pathology, University of Liverpool, 1894-1911. Represented Senate of University on Committee, 1898-1911. Dean of the School, 1899-1911. F.R.S., 1902. Member of 13th Expedition, to Bathurst, Conakry, and Freetown, 1904. Member of 16th Expedition, to New Orleans, and later to Honduras, 1905. Knighted, 1906. Member of 22nd Expedition, to West Indies, 1909. Member of 25th Expedition, to West Africa, 1910. Died June 16th, 1911.
- BREINL (Anton)**, M.U.Dr. John Garrett International Fellow, 1904-1906. Member of 15th Expedition, to Manáos, 1905. Invalided home with yellow fever. Assistant Lecturer, 1905. Director of Runcorn Research Laboratory, 1907-1909. Director of Institute of Tropical Medicine, Queensland, 1909-1920.
- BROCKLEHURST (George)**. Member of Committee, 1900-. Honorary Treasurer, 1903-1907.

- BROOKFIELD (Annie Maud). Secretary to Runcorn Research Laboratory, 1906-1914. Assistant to the Professor of Parasitology, 1916-
- BROWN (Maude). Assistant to the Professor of Entomology, 1917--
- BUCKLEY (Edmund Gladstone). Represented Royal Southern Hospital on Committee, 1913-
- BURNIE (Robert McColl), M.B., Ch.B. Research Assistant, Manios Research Laboratory, 1919-
- CARTER (Henry Francis). S.E.A.C. Dipl., F.E.S. Assistant Lecturer on Entomology, 1910-1913. Lecturer on Entomology, 1913-. Dysentery research, 1916-1917; malaria research, 1917-1919 [war work].
- CARTER (William), M.D., F.R.C.P. Physician, Royal Southern Hospital. Professor of Therapeutics, University College, Liverpool. Represented Royal Southern Hospital on Committee, 1898-1908. Took an active part in the establishment of the School.
- CATON (Richard), C.B.E., M.D., LL.D., F.R.C.P. Represented Council of University on Committee, 1902-. Vice-Chairman, 1913-.
- CHADWICK (Joseph). Represented Ship Owners' Association on Committee, 1899-1902.
- CHRISTIAN (H.R.H. the Princess). Honorary President, 1905-
- CHRISTY (Cuthbert), M.B., C.M. Assistant Lecturer, 1903-1906. Member of 12th Expedition, to Congo, 1903.
- CLARKE (Herbert), M.A., B.C. Member of 13th Expedition, to Bathurst, Conakry, and Freetown, 1904.
- COOPER (Clive Forster), M.A. Curator of Zoological Museum, Cambridge. Malaria research, 1917-1918 [war work].
- CROMER (Evelyn Baring), Earl, G.C.B. Honorary Vice-President, 1907-1916.
- DALE (Sir Alfred), M.A., LL.D. Principal of University College, 1899-1903. Vice-Chancellor of University, 1903-1919. Represented Council of University College on Committee, 1900-1904. *Ex-officio* member of Committee, 1904-1919.
- DANIELS (Charles Wilberforce), M.B., F.R.C.P. Late Medical Superintendent of London School of Tropical Medicine. Took part in 5th Expedition, to Sierra Leone, 1901.
- DANSON (Sir Francis Chatillon). Represented Council of University College on Committee, 1901-1902. Member of Committee, 1902-. Vice-Chairman, 1908-1913. Chairman, 1913-. Knighted, 1920.
- DANSON (John West Wood). Member of Committee, 1908-
- DEACON (Henry Wade), J.P. Chairman of Royal Infirmary. Represented Council of University on Committee, 1917-
- DERBY (Edward George Villiers Stanley), Earl of, K.G., G.C.V.O. Honorary Treasurer, 1908. Honorary Vice-President, 1908-
- DRAWZ (Walter W.). Librarian, 1910-1914.
- DURHAM (Herbert Edward), M.B., F.R.C.S. Grocers' Research Scholar. John Lucas Walker Student. Member of 4th Expedition, to the Amazon, 1900, subsequently proceeding to Cuba.
- DURNING-LAWRENCE (Sir Edwin), Bart. Honorary Vice-President, 1913-1914. Provided funds for research in Cryotherapy.
- DUTTON (John Everett), M.B., Ch.B. Holt Fellow, 1897; Walter Myers Fellow, 1901-1904. Member of 6th Expedition, to Gambia and Gold Coast, 1901. Member of 10th Expedition, to Gambia and French Senegal, 1902. Member of 12th Expedition, to Congo, 1903. Was the first to identify a trypanosome in man. Died in the Congo, 27th February, 1905, whilst serving on the 12th Expedition.
- DUVALL (H. Muriel), M.Sc. Research on grain pests, 1916-1918 [war work].
- EDIE (E. S.), M.A., B.Sc. Late on the staff of Liverpool University Institute of Commercial Research. Chemical research, 1910-1911.
- ELLIOTT (J. H.), M.D. Member of 3rd Expedition, to Nigeria, 1900.

- EVANS (Alwen Myfanwy), M.Sc. Assistant Lecturer in Entomology, 1918-
- EVANS (Arthur), F.R.C.S., L.R.C.P. Member of 13th Expedition, to Bathurst, Conakry, and Freetown, 1904.
- EVANS (Sydney). Acting Secretary, 1917-
- FANTHAM (Annie Porter), D.Sc. Dysentery research, 1916 [war work].
- FANTHAM (Harold Benjamin), D.Sc., M.A. Research Assistant in Parasitology, 1910. Assistant Lecturer on Parasitology, 1911-1913. Editorial Secretary, of the *Annals*, 1912-1916. Member of 31st Expedition, to Khartoum, 1913. Lecturer on Parasitology, 1913-1916. Professor of Zoology, University College, Johannesburg, 1916-
- FERNIE (Henry F.). Represented Ship Owners' Association on Committee, 1902-1903.
- FIELDING-OULD (Robert), M.A., M.D. Member of 2nd Expedition, to West Africa, 1899. Holt Fellow, 1900 and 1901. Assistant Lecturer on Tropical Diseases, 1900.
- GILES (G. M.), M.D., F.R.C.S. Lt.-Col., I.M.S. Member of 14th Expedition, to Gold Coast, Lagos, and Nigeria, 1904. Deputy Lecturer for Professor of Tropical Medicine, 1904.
- GLAZEBROOK (Richard Tetley), F.R.S. Principal of University College, 1898-1899. Represented Council of University College on Committee, 1898-1900.
- GLYNN (Ernest Edward), M.A., M.D. Professor of Pathology, University of Liverpool. Honorary Lecturer to the School, 1910-1913. Member of Committee, 1912-
- GOFSEY (J.), Colonel V.D. Represented Ship Owners' Association on Committee, 1899-1903.
- GORDON (Rupert Montgomery), M.B., Ch.B. Research Assistant, Manáos Research Laboratory, 1919-
- GRÜNBAUM (Albert S.). Assistant Lecturer in Tropical Medicine, 1900-1904.
- HANINGTON (John A. B.), M.D., C.M. Research Assistant, Runcorn Research Laboratory, 1906.
- HANLEY (Alan), C.M.G. Late P.M.O. Southern Nigeria. Member of 21st Expedition, to Jamaica, 1908.
- HARRISON (Thomas Frederic). Represented Steamship Owners' Association on Committee, 1904-
- HERDMAN (William Abbott), C.B.E., D.Sc., LL.D., F.R.S. Professor of Natural History, University of Liverpool, 1881-1919; Professor of Oceanography, 1919-. Represented Senate of University on Committee, 1912-
- HINDLE (Edward), Ph.D. Assistant at Runcorn Research Laboratory, 1907-1908.
- HOPE (Edward William), O.B.F., M.D., D.Sc. Medical Officer of Health for Liverpool; Professor of Public Health, University of Liverpool. Member of Committee, 1908-. Honorary Lecturer, 1910-1913. Lecturer on Municipal Sanitation, 1913-
- HUGHES (J. W.). Represented Steamship Owners' Association on Committee, 1899-1901.
- JAMES (Samuel). Secretary to Royal Southern Hospital. Honorary Secretary to the School, 1898-1899.
- JOHNSTON (Edmund). Represented Steamship Owners' Association on Committee, 1901-1903.
- JOHNSTON (William). Presented the Johnston Laboratories to University College, 1903, the ground floor of which was devoted to Tropical Medicine.
- JONES (Sir Alfred Lewis), K.C.M.G. Founder of the School, 1898. Chairman of Committee, 1898-1909. Created K.C.M.G., 1901. Died 13th Dec., 1909. Munificent benefactor of the School.
- JONES (Charles W.). Represented Council of University College on Committee, 1898-1901.
- JONES (David). Member of Committee, 1919-
- JONES (Sir Robert), C.B., D.Sc., Ch.M. Surgeon, Royal Southern Hospital.

- KELLY (Robert Ernest), C.B., M.D., B.Sc., F.R.C.S. Honorary Assistant Surgeon, Royal Infirmary.
- KINGHORN (Allan), M.B. Johnston Colonial Fellow, 1905. Demonstrator and Research Assistant, 1905-1906. Member of 18th Expedition, to Rhodesia and British Central Africa, 1907.
- LEVERHULME (William Hesketh Lever), Baron. Chairman of the School, 1910-1913. Created a baronet, 1911. Honorary Vice-President, 1913. Created a baron, 1917.
- LINTON (Stanley Fox), M.D., M.Sc. Research Assistant, 1903-1904.
- LIVINGSTON (Charles) Represented Steamship Owners' Association on Committee, 1901-1909. Member of Committee, 1909.
- MACALISTER (Charles John), M.D., F.R.C.P. Physician, Royal Southern Hospital. Represented Royal Southern Hospital on Committee, 1908-1915.
- MCCARTHY (J. L.). Assistant Secretary, Liverpool Chamber of Commerce. Deputy-Acting Secretary to the School, 1920-
- McCONNELL (Robert Ernest), M.D., C.M. Member of 14th Expedition, to Gold Coast, Lagos, and Nigeria, 1904.
- MACFIE (John William Scott), M.B., D.Sc. Pathologist, West African Medical Service. M.O. i/c malaria wards, Belmont Rd. Aux. Military Hospital, 1918-1919. Research on malaria and equine strongylidosis, 1916-1919 [war work].
- MACGREGOR (Sir William), K.C.M.G. Governor of Lagos. Member of 10th Expedition, to Ismailia, 1902.
- MCKENDRICK (Anderson). Member of 5th Expedition, to Sierra Leone, 1901.
- MACKINNON (Doris L.), D.Sc. Lecturer on Zoology, University of London, King's College. Dysentery research, 1916-1917 [war work].
- MARSHALL (Anthony Robert). Represented Ship Owners' Association on Committee, 1903-
- MATTHEWS (James R.), M.A. Lecturer on Botany, University of London, Birkbeck College. Dysentery research, 1916-1919 [war work].
- MEREWETHER (Sir Edward), K.C.V.O. Late Governor of Sierra Leone. Honorary Vice-President, 1914-
- MILLER (Robert Brown). Represented Association of West African Merchants on Committee, 1918-
- MILNE (Alan Hay), C.M.G. Secretary to Liverpool Chamber of Commerce. Secretary to the School, 1899-1917.
- MILNER (Alfred Milner), Viscount, G.C.B., G.C.M.G. Secretary of State for the Colonies. Vice-President of the School, 1910-.
- MONTGOMERY (Robert Eustace), M.R.C.V.S. Member of 18th Expedition, to Rhodesia and British Central Africa, 1907.
- MORGAN (Llewellyn Arthur), M.D., M.R.C.S. Capt., R.A.M.C. Assistant M.O. i/c Tropical School Aux. Military Hospital, 1915-1919.
- MORRIS (Herbert M.), M.Sc. Research on grain pests, 1919-1920 [war work].
- MURPHY (Nora). Laboratory Secretary, 1902-1919.
- MYERS (Walter), M.B. John Lucas Walker Student. Member of 4th Expedition, to the Amazon, 1900, subsequently proceeding to Cuba. Died in Pará, on January 20th, 1901, from yellow fever.
- NAUSS (Ralph Welty). Research Assistant, Runcorn Research Laboratory, 1910.
- NECK (G. van). Member of 1st Expedition, to West Africa, 1899.
- NEWBOLT (George Palmerston), M.B., F.R.C.S. Surgeon, Royal Southern Hospital. Represented Royal Southern Hospital on Committee, 1910-1915.
- NEWSTEAD (Robert), J.P., F.R.S., M.Sc., A.L.S., F.E.S. Lecturer in Economic Entomology and Parasitology, 1905-1911. Official Entomological Correspondent to 'The Gardener's Chronicle,' 1899-1910. Member of 21st Expedition, to Jamaica, 1908. Member of 24th Expedition, to Malta, 1910. Dutton Professor of Entomology, 1911-. Member of Royal Society's Sleeping Sickness Commission in Nyasaland, 1911. F.R.S., 1912. Member

- of Inter-Departmental Committee on Sleeping Sickness, 1913-1914. Organised anti-fly campaign in France and Flanders, 1915. Directed Royal Society Grain Pests (War) Commission, 1916-1920 [war work].
- NIERENSTEIN** (Maximilian), D.Sc., Ph.D. John Garrett International Fellow, 1906-1908. Research Demonstrator, Runcorn Research Laboratory, 1908-1909.
- NORTHUMBERLAND** (Henry George Percy), 7th Duke, K.G., F.R.S. Honorary Vice-President, 1902-1917.
- O'FARRELL** (W. R.), Major, R.A.M.C. Malaria research, 1919.
- PATERSON** (Andrew Melville), M.D., F.R.C.S. Professor of Anatomy, University of Liverpool, 1894-1919. Represented Senate of University College on Committee, 1899-1904.
- PHILLIPS** (Kathleen). Assistant Secretary, Runcorn Research Laboratory, 1907.
- PHILIPPS** (Sir Owen), K.C.M.G. Honorary Vice-President, 1910-
- PIRRIE** (William James Pirrie), Baron, K.P. Honorary Vice-President, 1910-
- PROUT** (William Thomas), M.B., C.M.G. Late P.M.O., Sierra Leone. Medical Adviser to the Colonial Office. Member of 21st Expedition, to Jamaica, 1908. Honorary Lecturer, 1907-1913. Lecturer on Tropical Sanitation, 1913-1919. Assistant Physician, Tropical Ward, Royal Infirmary, 1914-1919. Lt.-Col., R.A.M.C., 1915-1919. Honorary Lecturer on Tropical Sanitation, 1919-
- RANKIN** (Robert). Member of Committee, 1908-. Honorary Treasurer, 1919-
- REA** (Alec Lionel). Honorary Treasurer, 1908-1919.
- READ** (Sir Herbert James), K.C.M.G., C.B. Assistant Under-Secretary to the Colonial Office. Represented Colonial Office on Committee, 1912-
- ROBERTS** (John Lloyd), M.D., B.Sc. Physician at Royal Southern Hospital.
- ROBERTS** (William). Represented Steamship Owners' Association on Committee, 1903-
- ROGERSON** (Stanley) Represented West African Trade Association on Committee, 1901-1910.
- Ross** (Edward Halford), M.R.C.S., L.R.C.P. Assistant to Professor of Tropical Medicine, 1911.
- Ross** (Sir Ronald), M.D., F.R.S., K.C.B., K.C.M.G. Lecturer on Tropical Diseases, 1899-1901. Member of Committee, 1899-1905. Member of 1st Expedition, to West Africa, 1899. Member of 3rd Expedition, to Nigeria, 1900. Walter Myers Lecturer, 1901. Member of 5th Expedition, to Sierra Leone, 1901. F.R.S., 1901. Member of 8th Expedition, to Sierra Leone, 1902. Resigned Lectureship, 1902. Re-appointed, 1902. Member of 9th Expedition, to Ismailia, 1902. Nobel Laureate, 1902. C.B., 1902. Alfred Jones Professor of Tropical Medicine, 1903-1912. Paid a visit of inspection to Panama Canal, 1904. Member of 17th Expedition, to Lake Copais, Greece, 1906. Member of 20th Expedition, to Mauritius, 1907. Physician, Royal Southern Hospital, 1908-1914. Professor of Tropical Sanitation, Liverpool University, and Lecturer in the School, 1912-1917. Lt.-Col., R.A.M.C. [T.]. Consultant in malaria, War Office, 1917-1919.
- SEIDELIN** (Harald), M.D. Yellow Fever Bureau Research, 1911-1915. Member of 28th Expedition, to Yucatan, 1911. Member of 30th Expedition, to Jamaica, 1912. Member of Colonial Office Yellow Fever Commission, West Africa, 1913.
- SHERRINGTON** (Charles Scott), M.A., M.D., F.R.S., D.Sc. Professor of Physiology, University of Liverpool, 1895-1913. Member of Committee, 1901-1904. Represented Senate of University on Committee, 1904-1913.
- SIMPSON** (George Charles Edward), B.A., B.Sc., M.B. Research Assistant in Chemistry, 1910.
- SMITH** (Albert Malins), M.A. Lecturer on Biology, Technical College, Bradford. Dysentery research, 1916-1919 [war work].
- SOUTHWELL** (Thomas), A.R.C.Sc., F.Z.S. Late Director of Fisheries, Bengal and Bihar and Orissa. Assistant Lecturer on Parasitology, 1920-

- STEPHENS (John William Watson), M.D., F.R.S. Demonstrator in Tropical Pathology, 1902. Walter Myers Lecturer, 1903-1913. Member of 23rd Expedition, to Egypt, 1909. Alfred Jones Professor of Tropical Medicine, 1913-. Honorary Physician to Tropical Ward, Royal Infirmary, 1914-. M.O. i/c Tropical School Aux. Military Hospital, 1915-1919. Consultant in Malaria, Western, Northern, and Scottish Commands. Lt.-Col., R.A.M.C., 1917-1919. Research on malaria, 1915-1919 [war work]. Representative of the School on Tropical Diseases Advisory Committee, 1917-. Charles Kingsley Medallist, 1918. F.R.S., 1920.
- STEWART (Charles Balfour), M.A., M.B. Assistant Lecturer in Tropical Medicine, 1900. Member of 7th Expedition, to Gold Coast, 1901.
- STOTT (Walter). Honorary Statistician to the School, 1910-
- STRAFFORD (J. O.) Represented Liverpool Chamber of Commerce on Committee, 1899-1911. Honorary Treasurer, 1899-1903.
- TAYLOR (Matthew Logan), M.B., Ch.B. Member of 5th Expedition, to Sierra Leone, 1901. Member of 11th Expedition, to Gold Coast, 1902.
- THOMAS (Harold Wolferstan), M.D., C.M. Research Assistant and Director of Runcorn Research Laboratory, 1903-1905. Assistant Lecturer, 1905. Member of 15th Expedition, to Manáos, 1905. Member of 26th Expedition, to Manáos, 1910. Director of Manáos Research Laboratory, 1905-
- THOMAS (William Thelwall), Hon. Ch.M., F.R.C.S., L.R.C.P. Surgeon, Royal Infirmary. Professor of Regional Surgery and Lecturer in Clinical Surgery, University of Liverpool.
- THOMSON (David), O.B.E., M.B., Ch.B. Research Assistant in Malaria, 1910. Clinical Pathological Assistant, 1911-1913. Member of 29th Expedition, to Panama, 1912.
- THOMSON (John Gordon), M.A., M.B., Ch.B. Research Assistant in Cryotherapy, 1910-1913. Clinical Pathological Assistant, 1913.
- TINNE (J. A.). Represented Royal Southern Hospital on Committee, 1908-1913.
- TOBEY (Edward Nelson), M.D. Research Assistant, Runcorn Research Laboratory, 1906.
- TODD (John Lancelot), B.A., M.D., C.M. Member of 10th Expedition, to Gambia and French Senegal, 1902. Member of 12th Expedition, to Congo, 1903. Assistant Lecturer, 1905. Director of Runcorn Research Laboratory, 1906-1907. Member of 27th Expedition, to Gambia, 1911.
- WALKER (Charles Edward), D.Sc., M.R.C.S., L.R.C.P. Honorary Lecturer in Cytology, 1907-1908. Research on Cryotherapy, 1909.
- WARR (A. F.), M.P. Member of Committee, 1901-1908.
- WELSH (Thomas). Represented West African Trade Association on Committee, 1910-
- WHITTLE (Madge). Laboratory Secretary, 1919-
- WILLIAMS (Charles Louis), Major, I.M.S., ret. Honorary Lecturer, 1907. Research on Cryotherapy, 1909.
- WILLIAMS (Lewis Arthur), M.D. Demonstrator and Research Assistant, 1905.
- WILLIAMS (O. Harrison). Honorary Vice-President, 1910-
- WILLIAMS (Robert Stenhouse), B.Sc., M.D., C.M. Assistant Lecturer, 1909.
- WOLBACH (S. B.), M.D. Member of 27th Expedition, to Gambia, 1911.
- WOODSEND (Thomas). Represented Royal Southern Hospital on Committee, 1916-
- YORKE (Warrington), M.D. Holt Fellow, 1906. Member of 19th Expedition, to Nyasaland, 1907. Research Assistant, Runcorn Research Laboratory, 1909. Director, 1910. Member of Sleeping Sickness Commission of B.S.A. Co., to Rhodesia, 1911-1913. Walter Myers Professor of Parasitology, 1913-. Member of Committee, 1914-. Member of 32nd Expedition, to Sierra Leone, 1914. Capt., R.A.M.C., 1915. Physician, Tropical School Aux. Military Hospital, 1916-1919. Research on malaria, dysentery, and equine strongylidosis, 1916-1919 [war work].
- YOUNG (Charles James), M.B., Ch.B. Research Assistant, Manáos Research Laboratory, 1919-

APPENDIX II

EXPEDITIONS

The following is a complete list of the Expeditions sent out to the Tropics by the School from its foundation to the end of 1913:—

THE FIRST (MALARIAL) EXPEDITION : Major Ronald Ross, C.B., F.R.S., Dr. H. E. Annett, Mr. E. E. Austen (of the British Museum), and Dr. Van Neck (of Belgium), despatched to Sierra Leone, July, 1899.

THE SECOND (MALARIAL) EXPEDITION : Dr. R. Fielding Ould, despatched to the Gold Coast and Lagos in the winter of 1899.

THE THIRD (MALARIAL) EXPEDITION : Dr. H. E. Annett, Dr. J. E. Dutton, and Dr. Elliott, despatched to Northern and Southern Nigeria, March, 1900.

THE FOURTH (YELLOW FEVER) EXPEDITION : Dr. H. E. Durham and Dr. Walter Myers, despatched to Cuba, and to Pará, Brazil, June, 1900.

THE FIFTH (SANITATION) EXPEDITION : Major Ronald Ross, C.B., F.R.S., and Dr. Logan Taylor, despatched to Sierra Leone, June, 1901.

THE SIXTH (TRYPANOSOMIASIS) EXPEDITION : Dr. J. E. Dutton, despatched to the Gambia, September, 1901.

THE SEVENTH (MALARIAL) EXPEDITION : Dr. C. Balfour Stewart, despatched to the Gold Coast, November, 1901.

THE EIGHTH (SANITATION) EXPEDITION : Major Ronald Ross, C.B., F.R.S., despatched to Sierra Leone, February, 1902.

THE NINTH (MALARIAL) EXPEDITION : Major Ronald Ross, C.B., F.R.S., accompanied by Sir William MacGregor, K.C.M.G., the Governor of Lagos, despatched to Ismailia, September, 1902.

THE TENTH (TRYPANOSOMIASIS) EXPEDITION : Dr. J. E. Dutton and Dr. J. L. Todd, despatched to the Gambia and French Senegal, September, 1902.

THE ELEVENTH (SANITATION) EXPEDITION : Dr. M. Logan Taylor, despatched to the Gold Coast from Sierra Leone, October, 1902.

THE TWELFTH (TRYPANOSOMIASIS) EXPEDITION : Dr. J. E. Dutton, Dr. J. L. Todd, and Dr. C. Christy, despatched to the Congo Free State, September, 1903.

THE THIRTEENTH EXPEDITION : Professor Rubert Boyce, F.R.S., Dr. Arthur Evans, and Dr. Herbert H. Clarke, were despatched to Bathurst, Conakry, and Freetown, November, 1904, to report on the Sanitation and Anti-Malarial Measures in practice at the towns visited.

THE FOURTEENTH EXPEDITION : Lieut.-Col. G. M. Giles, Indian Medical Service (Rtd.), and Dr. R. Ernest McConnell, despatched to the Gold Coast, December, 1904, to organise sanitary and anti-malarial measures.

THE FIFTEENTH (YELLOW FEVER) EXPEDITION : Dr. H. Wolferstan Thomas and Dr. Anton Breinl, despatched to the Amazon, April, 1905.

THE SIXTEENTH (YELLOW FEVER) EXPEDITION : Professor Boyce, F.R.S., despatched to New Orleans, August, 1905, to observe the work of the United States Medical Authorities in dealing with the outbreak of Yellow Fever there. Professor Boyce subsequently visited British Honduras at the special request of the Colonial Office.

THE SEVENTEENTH (MALARIAL) EXPEDITION : Professor Ronald Ross, C.B., F.R.S., despatched to Lake Copais, in Greece, May, 1906, at the request of the Lake Copais Company.

THE EIGHTEENTH (SLEEPING SICKNESS) EXPEDITION : Dr. Allan Kinghorn and Mr. R. E. Montgomery, M.R.C.V.S., despatched to Rhodesia and British Central Africa, May, 1907.

THE NINETEENTH (BLACKWATER FEVER) EXPEDITION : Dr. J. O. Wakelin Barratt and Dr. W. Yorke despatched to Nyasaland, August, 1907.

THE TWENTIETH EXPEDITION : Professor Ronald Ross, C.B., F.R.S., despatched to Mauritius at the request of the Colonial Office, October, 1907, to study malaria.

THE TWENTY-FIRST EXPEDITION : Mr. R. Newstead, Dr. W. T. Prout, C.M.G., and Dr. Alan Hanley, C.M.G., despatched to Jamaica, November, 1908, to study cattle and other ticks.

THE TWENTY-SECOND EXPEDITION : Professor Sir Rubert Boyce, F.R.S., despatched to Barbadoes, March, 1909, at the request of the Colonial Office, to initiate a campaign against mosquitoes.

THE TWENTY-THIRD EXPEDITION : Dr. J. W. W. Stephens despatched to Egypt to study helminthology, November, 1909.

THE TWENTY-FOURTH EXPEDITION : Mr. R. Newstead, despatched to Malta for entomological investigations, June, 1910.

THE TWENTY-FIFTH EXPEDITION : Professor Sir Rubert Boyce, F.R.S., despatched to West Africa to report on the outbreak of Yellow Fever at Sierra Leone and the Gold Coast, June, 1910.

THE TWENTY-SIXTH (NORTH BRAZIL SANITATION) EXPEDITION : Dr. H. Wolferstan Thomas, despatched to Manáos in Brazil, May, 1910.

THE TWENTY-SEVENTH EXPEDITION : Professor J. L. Todd and Professor S. B. Wolbach, despatched to the Gambia to investigate Sleeping Sickness, January, 1911.

THE TWENTY-EIGHTH (YELLOW FEVER) EXPEDITION : Dr. Harald Seidelin, despatched to Yucatan, in Mexico, to study Yellow Fever, December, 1911.

THE TWENTY-NINTH (MALARIA) EXPEDITION : Dr. D. Thomson, despatched to Panama to confer with medical men there regarding the prevalence of Malaria, September, 1912.

THE THIRTIETH (VOMITING SICKNESS) EXPEDITION : Dr. Harald Seidelin, despatched to Jamaica to study Vomiting Sickness and other obscure Tropical Diseases, December, 1912.

THE THIRTY-FIRST EXPEDITION : Dr. H. B. Fantham despatched to Khartoum to study diseases prevalent there, July, 1913.

THE THIRTY-SECOND EXPEDITION : Professor Warrington Yorke and Dr. B. Blacklock despatched to Sierra Leone to study Sleeping Sickness and other Diseases there, November, 1914.

Reports of all the above Expeditions appear in the *Annals* and other publications of the School.

In addition, the services of the following members of the Staff of the School have been requisitioned :—

Major Sir Ronald Ross, K.C.B., F.R.S. Expedition to Panama Canal Zone. September, 1904. (At the request of the Panama Canal Commission.)

Professor Robert Newstead, F.R.S. Expedition to Nyasaland to study Sleeping Sickness. July—October, 1911. (At the request of the Colonial Office.)

Dr. Warrington Yorke. Expedition to Rhodesia to study Sleeping Sickness. August, 1911—October, 1912. (At the request of the British South Africa Company.)

Major Sir Ronald Ross, K.C.B., F.R.S. Expedition to Cyprus. January—April, 1913. (At the request of the Colonial Office.)

Dr. Harald Seidelin. Attached to the West Africa Yellow Fever Commission, at the request of the Colonial Office. October, 1913.



APPENDIX III.

**PAPERS PUBLISHED BY MEMBERS OF THE STAFF
WHILE AT THE SCHOOL.****Annett, H. E.**

(1) Note on the results of inoculation of blood from the European case
H. K. Liv. Sch. Trop. Med., Memoir XI, pp. 47-49. 1903.

[With J. E. DUTTON.]

(2) The hibernation of English mosquitoes. *Liv. Sch. Trop. Med., Memoir IV*, pp. 93-96. 1901.

[With J. E. DUTTON and J. H. ELLIOTT.]

(3) Report of the Malaria Expedition to Nigeria. Part I: Malaria. *Liv. Sch. Trop. Med., Memoir III*, pp. 1-66; Part II: Filariasis. *Liv. Sch. Trop. Med., Memoir IV*, pp. 1-92. 1901.

See also Breinl (5) and Ross (28).

Austen, E. E.

(1) Supplementary notes on the tsetse-flies (genus *Glossina*, Wiedemann). *Liv. Sch. Trop. Med., Memoir XIII*, pp. 101-112. 1904.

See also Ross (28).

Barratt, J. O. W.

(1) On the absence of a vesicant in the ether extract obtainable from mosquitoes. *Ann. Trop. Med. Parasit.*, Vol. IV, pp. 177-178. 1910.

(2) Recent experimental research bearing upon blackwater fever. *Ann. Trop. Med. Parasit.*, Vol. VII, pp. 367-369. 1913.

[With W. YORKE.]

(3) An investigation into the mechanism of the production of blackwater. *Ann. Trop. Med. Parasit.*, Vol. III, pp. 1-256. 1909.

(4) A method of estimating the total volume of blood contained in the living body. *Proc. Roy. Soc., Ser. B*, Vol. LXXXI, pp. 381-384. 1909.

(5) Ueber den Mechanismus der Entstehung der Hämoglobinurie bei Infektionen mit *Piroplasma canis*. *Zeit. für Immunitätsforschung und Exper. Therapie*, Vol. IV. Dec., 1909.

(6) Ueber Hämoglobinämie. *Zeit. für Immunitätsforschung und Exper. Therapie*, Vol. XII, Pt. 3. 1912.

(7) The production of general symptoms in haemoglobinaemia. *Brit. Med. Journ.* Jan. 31, 1914.

(8) The relation of bile pigments to haemoglobin. *Ann. Trop. Med. Parasit.*, Vol. VIII, pp. 509-536. 1914.

Blacklock, B.

(1) The measurement of a thousand examples of *Trypanosoma vivax*. *Ann. Trop. Med. Parasit.*, Vol. V, pp. 521-530. 1912.

(2) A note on the measurements of *Trypanosoma vivax* in rabbits and white rats. *Ann. Trop. Med. Parasit.*, Vol. V, p. 537. 1912.

(3) The vitality of, and changes undergone by, trypanosomes in the cadaver of the animal host. *Ann. Trop. Med. Parasit.*, Vol. VI, pp. 55-68. 1912.

(4) The trypanosomes found in a horse naturally infected in the Gambia. A double infection. *Ann. Trop. Med. Parasit.*, Vol. VI, pp. 107-116. 1912.

(5) The measurements of a thousand examples of a short form of trypanosome from a double infection. *Ann. Trop. Med. Parasit.*, Vol. VI, pp. 287-293. 1912.

Blacklock, B.—continued.

- (6) On the presence of posterior nucleated parasites in a strain of *T. brucei*. *Brit. Med. Journ.* Oct. 19, 1912.
- (7) On the resistance of *Cimex lectularius* to various reagents, powders, liquids, and gases. *Ann. Trop. Med. Parasit.*, Vol. VI, pp. 415-428. 1912.
- (8) The resistance of *Ornithodoros moubata* to various sheep dips. *Ann. Trop. Med. Parasit.*, Vol. VI, pp. 429-433. 1912.
- (9) External Myiasis in a monkey. *Brit. Med. Journ.* Jan. 11, 1913.
- (10) A study of the posterior nuclear forms of *Trypanosoma rhodesiense* (Stephens and Fantham) in rats. *Ann. Trop. Med. Parasit.*, Vol. VII, pp. 101-112. 1913.
- (11) On the multiplication and infectivity of *T. cruzi* in *Cimex lectularius*. *Brit. Med. Journ.* April 25, 1914.
- (12) *Ancylostoma ceylanicum* in the cat in Durban. *Ann. Trop. Med. Parasit.*, Vol. XIII, p. 297. 1919.

[With H. F. CARTER.]

- (13) The experimental infection, in England, of *Anopheles plumbeus*, Hal., with *Plasmodium vivax* (sporozoites in salivary glands). *Ann. Trop. Med. Parasit.*, Vol. XIII, pp. 187-188. 1919.
- (14) The experimental infection, in England, of *Anopheles plumbeus*, Stephens, and *Anopheles bifuratus*, L., with *Plasmodium vivax*. *Ann. Trop. Med. Parasit.*, Vol. XIII, pp. 413-420. 1920.
- (15) Observations on *Anopheles (Coelodiazesis) plumbeus*, Stephens, with special reference to its breeding places, occurrence in the Liverpool district, and possible connection with the spread of malaria. *Ann. Trop. Med. Parasit.*, Vol. XIII, pp. 421-444. 1920.

- (16) On the results obtained from surveys for breeding places of tree-hole mosquitoes in Liverpool and neighbourhood. *Ann. Trop. Med. Parasit.*, Vol. XIV, pp. 115-126. 1920.

[With W. R. O'FARRELL.]

- (17) Note on a case of multiple infection by *Dracunculus medinensis*. *Ann. Trop. Med. Parasit.*, Vol. XIII, pp. 189-194. 1919.

[With W. YORKE.]

- (18) The trypanosomes causing dourine. *Proc. Roy. Soc.*, Vol. LXXXVII, pp. 89-96. 1913.
- (19) *Trypanosoma vivax* in rabbits. *Ann. Trop. Med. Parasit.*, Vol. VII, pp. 563-568. 1913.
- (20) The probable identity of *Trypanosoma congolense* (Broden) and *T. nanum* (Laveran). *Ann. Trop. Med. Parasit.*, Vol. VII, pp. 603-607. 1913.

See also Stephens (28, 44-73) and Yorke (16-28).

Boyce, R.

- (1) The anti-malaria measures at Ismailia, 1902-4. *Liv. Sch. Trop. Med., Memoir XII*, pp. 1-9. 1904.
- (2) Yellow fever prophylaxis in New Orleans. *Liv. Sch. Trop. Med., Memoir XIX*, pp. 1-62. 1906.
- (3) Mosquito or Man? The Conquest of the Tropical World. 8°, London : Murray, 1909.
- (4) Health Progress and Administration in the West Indies. 8°, London : Murray, 1910. 2nd ed., 1910.
- (5) Malaria prevention in Jamaica. *Ann. Trop. Med. Parasit.*, Vol. IV, pp. 233-238. 1910.
- (6) Note upon yellow fever in the black race and its bearing upon the question of the endemicity of yellow fever in West Africa. *Ann. Trop. Med. Parasit.*, Vol. V, pp. 103-110. 1911.
- (7) Yellow Fever and its Prevention: a Manual for Medical Students and Practitioners. 8°, London : Murray, 1911.

Boyce, R.—continued.

[With A. BREINL.]

- (8) Atoxyl and trypanosomiasis. *Ann. Trop. Med. Parasit.*, Vol. II, pp. 1-32. 1908.

[With A. EVANS and H. H. CLARKE.]

- (9) Report on the sanitation and anti-malarial measures in practice in Bathurst, Conakry, and Freetown. *Liv. Scb. Trop. Med., Memoir XIV*, pp. 1-40. 1905.

[With F. C. LEWIS.]

- (10) The effect of mosquito larvae upon drinking-water. *Ann. Trop. Med. Parasit.*, Vol. III, pp. 591-594. 1910.

See also Stephens (29).

Breinl, A.

- (1) Pathological report of the histology of sleeping sickness and trypanosomiasis, with a comparison of the changes found in animals infected with *Trypanosoma gambiense* and other Trypanosomata. *Proc. Roy. Soc., Ser. B*, Vol. LXXVII, pp. 233-235. 1906.

- (2) On the specific nature of the spirochaeta of the African tick fever. *Liv. Scb. Trop. Med., Memoir XX*, pp. 69-72. 1906.

- (3) On the morphology and life-history of *Spirochaeta duttoni*. *Ann. Trop. Med. Parasit.*, Vol. I, pp. 435-438. 1907.

- (4) Experiments on the combined atoxyl-mercury treatment in monkeys infected with *Trypanosoma gambiense*. *Ann. Trop. Med. Parasit.*, Vol. II, pp. 345-351. 1909.

[With H. E. ANNETT.]

- (5) Short note on the mechanism of haemolysis in *Piroplasmosis canis*. *Ann. Trop. Med. Parasit.*, Vol. II, pp. 383-385. 1909.

[With E. HINDLE.]

- (6) Contributions to the morphology and life-history of *Piroplasma canis*. *Ann. Trop. Med. Parasit.*, Vol. II, pp. 233-248. 1908.

- (7) A new *Poroccephalus* (*Poroccephalus cercopitheci*, n.sp.). *Ann. Trop. Med. Parasit.*, Vol. II, pp. 321-322. 1909.

- (8) Observations on the life-history of *Trypanosoma lewisi* in the rat-louse (*Haematopinus spinulosus*). *Ann. Trop. Med. Parasit.*, Vol. III, pp. 553-564. 1910.

[With A. KINGHORN.]

- (9) Observations on the animal reactions of the spirochaete of the African tick fever. *Liv. Scb. Trop. Med., Memoir XX*, pp. 61-65. 1906.

- (10) An experimental study of the parasite of the African tick fever. *Liv. Scb. Trop. Med., Memoir XXI*, pp. 1-52. 1906.

- (11) Note on a new *Spirochaeta* found in a mouse. *Liv. Scb. Trop. Med., Memoir XXI*, pp. 55-56. 1906.

[With A. KINGHORN and J. L. TODD.]

- (12) Attempts to transmit spirochaetes by the bites of *Cimex lectularius*. *Liv. Scb. Trop. Med., Memoir XXI*, pp. 113-118. 1906.

[With M. NIERENSTEIN.]

- (13) Weitere Beobachtungen über Atoxylfestigkeit der Trypanosomen. *Dent. Med. Woch.*, No. 27. 1908.

- (14) The action of aryl-stibinic acids in experimental trypanosomiasis. *Ann. Trop. Med. Parasit.*, Vol. II, pp. 365-382. 1909.

- (15) Bio-chemical and therapeutical studies on trypanosomiasis. *Ann. Trop. Med. Parasit.*, Vol. III, pp. 395-420. 1909.

[With J. L. TODD.]

- (16) Atoxyl in the treatment of trypanosomiasis. *Brit. Med. Journ.* Jan. 19, 1907.

See also Boyce (8), Salvin-Moore (1-4), and Thomas (6).

Carter, H. F.

- (1) A new Anopheline from South Africa. *Entomologist*, Vol. XLIII, pp. 237-238. 1910.
 - (2) Report on a collection of Culicidae from Cochin China. *Entomologist*, Vol. XLIII, pp. 274-276. 1910.
 - (3) A new mosquito from Uganda. *Bull. Ent. Research*, Vol. II, pp. 37-38. 1911.
 - (4) Descriptions of three new African species of the genus *Tabanus*. *Ann. Trop. Med. Parasit.*, Vol. VI, pp. 435-442. 1912.
 - (5) On certain mosquitoes of the genera *Banksinella*, Theobald, and *Taeniorhynchus*, Arribalzaga. *Ann. Trop. Med. Parasit.*, Vol. VII, pp. 581-589. 1913.
 - (6) On some previously undescribed Tabanidae from Africa. *Ann. Trop. Med. Parasit.*, Vol. IX, pp. 173-196. 1915.
 - (7) On three new African midges. *Ann. Trop. Med. Parasit.*, Vol. X, pp. 131-138. 1916.
 - (8) Remarks on the spirochaetes occurring in the faeces of dysenteric patients. *Ann. Trop. Med. Parasit.*, Vol. X, pp. 391-396. 1917.
 - (9) New West African Ceratopogoninae. *Ann. Trop. Med. Parasit.*, Vol. XII, pp. 289-302. 1919.
 - (10) Descriptions of the male genital armatures of the British anopheline mosquitoes. *Ann. Trop. Med. Parasit.*, Vol. XIII, pp. 453-457. 1920.
 - (11) The Blood-sucking Nematocera. In *The Practice of Medicine in the Tropics*, Vol. I. 1920. (In the press.)
- [With B. BLACKLOCK.]
- (12) External myiasis in a monkey. *Brit. Med. Journ.* Jan. 11, 1913.
- [With J. R. MATTHEWS.]
- (13) The value of concentrating the cysts of protozoal parasites in examining the stools of dysenteric patients for pathogenic entamoebae. *Ann. Trop. Med. Parasit.*, Vol. XI, pp. 195-204. 1917.
- [With D. L. MACKINNON, J. R. MATTHEWS, and A. M. SMITH.]
- (14) The protozoal findings in nine hundred and ten cases of dysentery examined at the Liverpool School of Tropical Medicine, from May to September, 1916 (First Report). *Ann. Trop. Med. Parasit.*, Vol. X, pp. 411-426. 1917.
 - (15) Protozoological investigation of cases of dysentery conducted at the Liverpool School of Tropical Medicine (Second Report). *Ann. Trop. Med. Parasit.*, Vol. XI, pp. 27-68. 1917.
 - (16) Protozoological examinations made in the Liverpool School of Tropical Medicine; being Part III of the *Medical Research Committee's Special Report, No. 7*: Report upon 2,360 enteritis 'convalescents' received at Liverpool from various Expeditionary Forces. 1918.
- See also* Machie (1), Newstead (59, 61), Stephens (48-68), and Yorke (29).

Carter, R. M.

- (1) The presence of *Spirochaeta duttoni* in the ova of *Ornithodoros moubata*. *Ann. Trop. Med. Parasit.*, Vol. I, pp. 157-160. 1907.

Christophers, S. R.

[With R. NEWSTEAD.]

- (1) On a new pathogenic louse which acts as the intermediary host of a new haemogregarine in the blood of the Indian field-rat (*Jerbellus indicus*). *Thompson Yates Lab. Reports*, Vol. VII, pp. 1-6. 1906.

[With J. W. W. STEPHENS.]

- (2) Note on a new *Scibistosomum* egg. *Journ. Trop. Med. & Hyg.*, Vol. III, p. 250. 1905.

See also Ross (30), Stephens (30-33).

Christy, C.

- (1) The cerebro-spinal fluid in sleeping sickness (Trypanosomiasis): 104
 lumbar punctures. *Liv. Sch. Trop. Med., Memoir XIII*, pp. 57-71. 1904.
See also Dutton (10-13).

Clarke, H. H.

See Boyce (9).

Connal, A.

See Seidelin (31, 32).

Cooper, C. F.

See Stephens (44-68).

Durham, H. E.

- (1) Report of the Yellow Fever Expedition to Pará. *Liv. Sch. Trop. Med., Memoir VII*, pp. 1-75. 1902.

[With W. MYERS.]

- (2) Notes on the sanitary conditions obtaining in Pará. *Liv. Sch. Trop. Med., Miscellanea*, pp. 1-10. 1901.

Dutton, J. E.

- (1) Preliminary note upon a trypanosome occurring in the blood of man. *Tompson Yates Lab. Reports*, Vol. IV, Pt. 2, pp. 455-469. 1902.

- (2) Report of the Malaria Expedition to the Gambia. *Liv. Sch. Trop. Med., Memoir X*, pp. 1-46. 1903.

- (3) The intermediary host of *Filaria cypseli*. *Tompson Yates Lab. Reports*, Vol. VI, Pt. 1, pp. 139-146. 1905.

[With J. L. TODD.]

- (4) First Report of the Trypanosomiasis Expedition to Senegambia. *Liv. Sch. Trop. Med., Memoir XI*, pp. 1-57. 1903.

- (5) Gland puncture in Trypanosomiasis. *Liv. Sch. Trop. Med., Memoir XVI*, pp. 97-102. 1905.

- (6) The nature of human tick fever in the Eastern part of the Congo Free State. *Liv. Sch. Trop. Med., Memoir XVII*, pp. 1-18. 1905.

- (7) The distribution and spread of sleeping sickness in the Congo Free State with suggestions on prophylaxis. *Liv. Sch. Trop. Med., Memoir XVIII*, pp. 23-38. 1906.

- (8) Rapport sur la prophylaxie de la malaria dans les principaux postes de l'Etat Indépendant du Congo. *Liv. Sch. Trop. Med., Memoir XX*, pp. 1-58. 1906.

- (9) Gland palpation in human Trypanosomiasis. *Liv. Sch. Trop. Med., Memoir XVIII*, pp. 1-22. 1906.

[With J. L. TODD and C. CHRISTY.]

- (10) Human Trypanosomiasis on the Congo. *Liv. Sch. Trop. Med., Memoir XIII*, pp. 1-10. 1904.

- (11) Human Trypanosomiasis and its relation to Congo Sleeping Sickness. *Liv. Sch. Trop. Med., Memoir XIII*, pp. 11-48. 1904.

- (12) The Congo floor maggot. *Liv. Sch. Trop. Med., Memoir XIII*, pp. 49-55. 1904.

- (13) Two cases of Trypanosomiasis in Europeans. *Liv. Sch. Trop. Med., Memoir XIII*, pp. 89-97. 1904.

[With J. L. TODD and J. W. B. HANINGTON.]

- (14) Trypanosome transmission experiments. *Ann. Trop. Med. Parasit.*, Vol. I, pp. 199-229. 1907.

[With J. L. TODD and A. KINGHORN.]

- (15) Cattle trypanosomiasis in the Congo Free State. *Ann. Trop. Med. Parasit.*, Vol. I, pp. 231-271. 1907.

Dutton, J. E.—continued.

[With J. L. Todd and E. N. TOBEY.]

(16) A comparison between the trypanosomes present by day and night in the peripheral blood of cases of human trypanosomiasis. *Liv. Sch. Trop. Med., Memoir XXI*, pp. 59-64. 1906.

(17) Concerning certain parasitic protozoa observed in Africa. *Liv. Sch. Trop. Med., Memoir XXI*, pp. 87-97. 1906.

(18) Concerning haemoflagellates of an African fish (*Clarias angolensis*). *Journ. Med. Research*, Vol. XV, No. 3. 1906.

(19) Trypanosomes of the trumpeter hornbill (*Bycanistes buccinator*). *Journ. Med. Research*, Vol. XVI, No. 1. 1907.

(20) Concerning certain parasitic protozoa observed in Africa. *Ann. Trop. Med. Parasit.*, Vol. I, pp. 285-370. 1907.

See also Annett (2, 3), Newstead (65).

Duvall, H. M.

See Newstead (66-68).

Edie, E. S.

[With W. H. EVANS, B. MOORE, G. C. SIMPSON, and A. WEBSTER.]

(1) The anti-neuritic bases of vegetable origin in relationship to Beriberi, with a method of isolation of torulin, the anti-neuritic base of yeast. *Ann. Trop. Med. Parasit.*, Vol. VI, pp. 235-243. 1912. Also in *Bio-chem. Journ.*, Vol. VI, pp. 234-242.

See also Ross (31) and Simpson (5-7).

Elliott, J. H.

See Annett (3).

Evans, A.

See Boyce (9).

Evans, A. M.

(1) On the genital armature of the female tsetse flies (*Glossina*). *Ann. Trop. Med. Parasit.*, Vol. XIII, pp. 31-56. 1919.

Evans, W. H.

See Edie (1).

Fantham, H. B.

(1) On the occurrence of schizogony in an avian leucocytozoon, *L. lovati*, parasitic in the red grouse, *Lagopus scoticus*. *Ann. Trop. Med. Parasit.*, Vol. IV, pp. 255-260. 1910.

(2) The life history of *Trypanosoma gambiense* and *Trypanosoma rhodesiense* as seen in rats and guinea-pigs. *Proc. Roy. Soc., B*, Vol. LXXXIII, pp. 212-227. 1911. Also in *Ann. Trop. Med. Parasit.*, Vol. IV, pp. 465-485. 1911.

(3) On the amoebae parasitic in the human intestine, with remarks on the life-cycle of *Entamoeba coli* in cultures. *Ann. Trop. Med. Parasit.*, Vol. V, pp. 111-123. 1911.

(4) Some researches on the life cycle of spirochaetes. *Ann. Trop. Med. Parasit.*, Vol. V, pp. 479-500. 1911.

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[With G. C. E. SIMPSON.]

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[With J. W. S. MACFIE.]

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- (31) Strongylidae in Horses. II : *Cylicostomum minutum*, sp. n. *Ann. Trop. Med. Parasit.*, Vol. XI, pp. 405-409. 1918.
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[With R. W. NAUSS.]

- (39) The mechanism of the production of suppression of urine in blackwater fever. *Ann. Trop. Med. Parasit.*, Vol. V, pp. 287-312. 1911.

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See also Barratt (3-8), Blacklock (18-20), Kinghorn (6-13), Macfie (2), Nauss (1), Stannus (1), and Stephens (44-73).

APPENDIX IV

The following have obtained the Diploma in Tropical Medicine of the University of Liverpool:—

DIPLOMA IN TROPICAL MEDICINE

<i>Date of Diploma</i>	<i>Date of Diploma</i>
1904 Augustine, Henry Joshua	1906 Pearse, Albert
1904 Bennett, Arthur King	1906 Sampson, Alexander William
1904 Bruce, William James	1906 Smithson, Arthur Ernest
1904 Byrne, John Scott	1906 Taylor, Joseph van Someron
1904 Clayton, Thomas Morrison	1906 Taylor, William Irwin
1904 Dalziel, John McEwen	1906 Tynan, Edward Joseph
1904 Dee, Peter	1906 Watson, Cecil Francis
1904 Greenidge, Oliver Campbell	1906 Willcocks, Roger Durant
1904 Hehir, Patrick	1906 Williamson, George Alexander
1904 Khan, Saiduzzafar	
1904 Laurie, Robert	1907 Allan, Alexander Smith
1904 Maclurkin, Alfred Robert	1907 Allwood, James Aldred
1904 McConnell, Robert Ernest	1907 Bond, Ashton
1904 Nicholson, James Edward	1907 Branch, Stanley
1904 Philipson, Nicholas	1907 Collinson, Walter Julius
1904 Sharman, Eric Harding	1907 Davey, John Bernard
1904 Thomson, Frank Wyville	1907 Donaldson, Anson Scott
1904 Walker, George Francis Clegg	1907 Fell, Matthew Henry Gregson
1905 Anderson, Catherine Elmslie	1907 Gann, Thomas William Francis
1905 Brown, Alexander	1907 Graham, Thomas William Francis
1905 Caldwell, Thomas Cathcart	1907 Graham, James Drummond
1905 Critton, Attilio	1907 Hiscock, Robert Carroll
1905 Hooton, Alfred	1907 Keane, Joseph Gerald
1905 Hudson, Charles Tilson	1907 Kennan, Richard Henry
1905 Illington, Edmund Moritz	1907 Kenrick, William Hamilton
1905 Macfarlane, Robert Maxwell	1907 Le Fanu, George Ernest Hugh
1905 Maddock, Edward Cecil Gordon	1907 Mackey, Charles
1905 Moore, James Jackson	1907 Maddox, Ralph Henry
1905 Nightingale, Samuel Shore	1907 McCarthy, John McDonald
1905 Radcliffe, Percy Alexander Hurst	1907 Raikes, Cuthbert Taunton
1905 Young, John Cameron	1907 Ryan, Joseph Charles
	1907 Vallance, Hugh
1906 Adie, Joseph Rosamond	1908 Caverhill, Austin Mack
1906 Arnold, Frank Arthur	1908 Crawford, Gilbert Stewart
1906 Bate, John Brabant	1908 Dalal, Kaikhosroo Rustomji
1906 Bennetts, Harold Graves	1908 Dansey-Browning, George
1906 Carter, Robert Markham	1908 Davidson, James
1906 Chisholm, James Alexander	1908 Dickson, John Rhodes
1906 Clements, Robert William	1908 Dowdall, Arthur Melville
1906 Dundas, James	1908 Glover, Henry Joseph
1906 Faichnie, Norman	1908 Greaves, Francis Wood
1906 Jeffreys, Herbert Castleman	1908 Goodbody, Cecil Maurice
1906 Mackenzie, Donald Francis	1908 Harrison, James Herbert Hugh
1906 Pailthorpe, Mary Elizabeth	1908 Joshi, Lemuel Lucas
1906 Palmer, Harold Thornbury	1908 Le Fanu, Cecil Vivian

<i>Date of Diploma</i>	<i>Date of Diploma</i>
1908 Luethgen, Carl Wilhelm Ludwig	1910 Nanavati, Kishavlal Balabhai
1908 Mama, Jamshed Byramji	1910 Nauss, Ralph Welty
1908 McCay, Frederick William	1910 Oakley, Philip Douglas
1908 McLellan, Samuel Wilson	1910 Pratt, Ishmael Charles
1908 Pearce, Charles Ross	1910 Sebastian, Thiruchelvam
1908 Schoorel, Alexander Frederik	1910 Shaw, Hugh Thomas
1908 Smith, John Macgregor	1910 Sieger, Edward Louis
1908 Stewart, George Edward	1910 Sousa, Pascal John de
1908 Tate, Gerald William	1910 Souza, Antonio Bernardo de
1908 Whyte, Robert	1910 Waterhouse, John Howard
1909 Abercrombie, Rudolph George	1910 White, Maurice Forbes
1909 Allin, John Richard Percy	1911 Blacklock, Breadalbane
1909 Armstrong, Edward Randolph	1911 Brown, Frederick Forrest
1909 Barrow, Harold Percy Waller	1911 Chand, Diwan Jai
1909 Beatty, Guy	1911 Holmes, John Morgan
1909 Carr-White, Percy	1911 Ievors, Charles Langley
1909 Chevallier, Claude Lionel	1911 Iles, Charles Cochrane
1909 Clark, William Scott	1911 Ingram, Alexander
1909 Cope, Ricardo	1911 Kirkwood, Thomas
1909 Fleming, William	1911 Knowles, Benjamin
1909 Hanschell, Hother McCormick	1911 Liddle, George Marcus Berkeley
1909 Hayward, William Davey	1911 Lomas, Emanuel Kenworthy
1909 Henry, Sydney Alexander	1911 Mackarell, William Wright
1909 Innes, Francis Alexander	1911 MacKnight, Dundas Simpson
1909 Jackson, Arthur Frame	1911 Mascarenhas, Joseph Victor
1909 Kara, Sorabji Manekji	1911 Murray, Ronald Roderick
1909 McCabe-Dallas, Alfred Alexander Donald	1911 Oluwole, Akidiya Ladapo
1909 Meldrum, William Percy	1911 Rao, Koka Ahobala
1909 Murphy, John Cullinan	1911 Sinton, John Alexander
1909 Samuel, Mysore Gnananandaraju	1911 Tarapurwalla, Byramji Shakshah
1909 Shroff, Kawasjee Byramjee	1911 Taylor, John Archibald
1909 Thornely, Michael Harris	1911 Woods, William Medlicott
1909 Turkhud, Violet Ackroyd	1912 Aeria, Joseph Reginald
1909 Webb, William Spinks	1912 Anderson, Edmund Litchfield
1909 Yen, Fu-Chun	1912 Borle, James
1910 Brabazon, Edward	1912 Bowie, John Tait
1910 Castellino, Louis	1912 Brassey, Laurence Percival
1910 Caulcrick, James Akilade	1912 Christie, David
1910 Dowden, Richard	1912 Dillon, Henry de Courcy
1910 Haigh, William Edwin	1912 Dunn, Lillie Eleanor
1910 Hamilton, Henry Fleming	1912 Hardwicke, Charles
1910 Hefferman, William St. Michael	1912 Jagose, Jamshed Rustomji
1910 Hipwell, Abraham	1912 Kochhar, Mela Ram
1910 Homer, Jonathan	1912 McGusty, Victor William Tighe
1910 Houston, William Mitchell	1912 Milne, Arthur James
1910 James, William Robert Wallace	1912 Mitra, Mannatha Nath
1910 Johnstone, David Patrick	1912 Myles, Charles Duncan
1910 Korke, Vishnu Tatyaji	1912 Pelly, Huntly Nevis
1910 Macdonald, Angus Graham	1912 Prasad, Bindeshwari
1910 Macfie, John Wm. Scott	1912 Prentice, George
1910 Manuk, Mack Walter	1912 Ross, Frank
1910 Murison, Cecil Charles	1912 Russell, Alexander James Hutchison
	1912 Ruthven, Morton Wood

<i>Date of Diploma</i>	<i>Date of Diploma</i>
1912 Sandilands, John	1914 Rowe, John Joseph Stephen
1912 Seddon, Harold	1914 Roy, Raghu Nath
1912 Smalley, James	1914 Shiveshwarkar, Ramchandra Vishnu
1912 Strickland, Percy Charles Hutchison	1914 Sur, Sachindra Nath
1912 Watson, William Russel	1914 Talati, Dadabhai Cursedji
	1914 Wilkinson, Arthur Geden
1913 Austin, Charles Miller	1914 Wright, Ernest Jenner
1913 Banker, Shiavux Sorabji	
1913 Becker, Johann Gerhardus	1915 Lobo, John Francis
1913 Carrasco, Milton	1915 Madhok, Gopal Dass
1913 Clark, James McKillican	1915 Pearson, George Howorth
1913 Forsyth, Charles	1915 Swami, Karumuri Virabhadra
1913 Grahame, Malcom Claude Russell	1915 Wood, John
1913 Grieve, Kelburne King	
1913 Hargreaves, Alfred Ridley	1916 Barseghian, Mesroob
1913 Hepper, Evelyn Charles	1916 Chaliha, Lakshmi Prasad
1913 Hirandani, Pandit	1916 Lim, Albert Liat Juay
1913 Jackson, Oswald Egbert	1916 Lim, Harold Liat Hin
1913 Khaw, Ignatius Oo Kek	1916 Metzger, George Nathaniel
1913 MacKelvie, Maxwell	1916 Söderström, Erik Daniel
1913 MacKinnon, John MacPhail	1916 Wheeler, Louis
1913 Macmillan, Robert James Alan	
1913 Mouat-Biggs, Charles Edward Forbes	1917 Chapman, Herbert Owen
1913 Noronha, John Carmel	1917 Krishnamoorthy, Yedatore Venkoba
1913 O'Connor, Edward	1917 Lipkin, Isaac Jacob
1913 Olubomi-Beckley, Emanuel	1918 Watts, Rattan Claud
1913 Pestonji, Ardesir Behramshaw	
1913 Puttanna, Dodballapur Sivappa	1919 Bowle-Evans, Charles Harford
1913 Reford, John Hope	1919 Burnie, Robert McColl
1913 Smith, Edward Arthur	1919 Celestin, Louis Abel
1913 Stewart, Samuel Dudley	1919 Cummings, Eustace Henry Taylor
1913 Walker, Frederick Dearden	1919 Darling, Georgina Renington
1913 Wilbe, Ernest Edward	1919 Drake, Joan Margaret Fraser
1913 Wilson, Hubert Francis	1919 Fraser, William James
1913 Yin, Ulg Ba	1919 Gordon, Rupert Montgomery
1913 Young, William Alexander	1919 Krige, Christian Frederick
	1919 Maplestone, Philip Alan
1914 Arculli, Hassan el	1919 Oluwole, Isaac Ladipo
1914 Chohan, Noormahomed Kasembha	1919 Rustoinjee, Khusshuvee Jamesidjee
1914 Connell, Harry Betram	1919 Sawers, William Campbell
1914 Gerrard, Herbert Shaw	1919 Thompson, Mary Georgina
1914 Gimi, Hirji Dorabji	1919 Turner, Gladys Maude
1914 Gwynne, Joseph Robert	1919 Young, Charles James
1914 Hodkinson, Samuel Paterson	
1914 Jackson, Arthur Ivan	1920 Anderson, William Jenkins Webb
1914 Kaushash, Ram Chander	1920 Cobb, Charles Eric
1914 Kelsall, Charles	1920 Cobb, Enid Margaret Mary
1914 Luanco y Cuenca, Maximino	1920 Fernandez, Daniel David
1914 Misbah, Abdul-Ghani Naguib	1920 O Farrell, Patrick Theodore Joseph
1914 Naidu, Bangalore Pasupulati Balakrishna	1920 Renner, Edward Awunor
	1920 Vaughan, James Churchill

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